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# CALIMESA GENERAL PLAN





APR 11 1995

UNIVERSITY OF CALIFORNIA  
RESOLUTION NO. 94-5

95 00107  
Res. No. 94-5

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALIMESA ADOPTING  
A COMPREHENSIVE GENERAL PLAN AND CERTIFYING THE ACCOMPANYING  
ENVIRONMENTAL IMPACT REPORT**

**WHEREAS**, The City of Calimesa was incorporated on December 1, 1990 as a general law city of the State of California; and

**WHEREAS**, Section 65300 of the State Planning and Zoning Law (Division 1 of Title 7 of the California Government Code) requires every city and county to adopt a comprehensive, long-term general plan for the physical development of the City; and

**WHEREAS**, the City Council of the City of Calimesa established as a priority the creation and adoption of a comprehensive General Plan for the City; and

**WHEREAS**, the City initiated a community participation program throughout the development of the General plan with the use of citizen surveys and the formation of the General Plan Advisory Committee which held a total of eighteen (18) public meetings; and

**WHEREAS**, the City determined, on the basis of initial studies, that an Environmental Impact Report (EIR) should be prepared for the General Plan in accordance with the California Environmental Quality Act (CEQA); and

**WHEREAS**, the City prepared a Draft General Plan dated August, 1993, a copy of which is on file in the Office of the City Clerk which is incorporated herein by reference. The Draft General Plan was prepared pursuant to California Government Code Section 65300 *et. seq.* and in accordance with the General Plan Guidelines promulgated by the Governor's Office of Planning and Research; and

**WHEREAS**, the City submitted the proposed General Plan to other public agencies for review as follows:

(a) The draft Housing Element was submitted to the State Department of Housing and Community Development (HCD) for review on June 2, 1993 pursuant to Government Code Section 65585(b). HCD's comments on the draft were received by the City in the form of a letter dated August 31, 1993. The City reviewed the comments and the Housing Element has been amended in response to those comments as outlined in a document prepared by the City's consultant dated September 30, 1993. The amended Housing Element was submitted to HCD on November 18, 1993. HCD's comments on the amended Housing Element were received by the City in the form of a letter dated December 31, 1993. The City reviewed the comments and the Housing Element has been amended in response to those comments as outlined in a document prepared by the City's consultant dated January 11, 1994.

(b) The proposed General Plan was distributed for review and comment pursuant to Government Code Section 65352 to the County of Riverside; the Cities of Yucaipa and Beaumont; all school districts, water and sewer districts, public utilities and other special districts providing service within the planning area; the Southern California Association of Governments; the California Department of Transportation; and other State, federal and county agencies with lands or jurisdiction within the planning area. The comments from these agencies are summarized in the Final Environmental Impact Report ("EIR").

(c) The City's consultant consulted with the Division of Mines and Geology of the Department of Conservation for the purpose of including information known by and available to the department required by Government Code Section 65302(g). The draft Safety Element was submitted to the Division of Mines and Geology on September



21, 1993 for review and comment. The Division responded in a letter dated December 3, 1993 which stated that the element meets the intent of Government Code Section 65302(g).

WHEREAS, the Planning Commission of the City of Calimesa, for purposes of the General Plan, conducted duly advertised public hearings and a joint study session with the City Council on the following dates:

September 13, 1993  
October 12, 1993  
November 8, 1993  
December 2, 1993 (Joint)  
December 13, 1993

WHEREAS, the Planning Commission recommended approval of the Draft General Plan on November 8, 1993 and the accompanying environmental impact report on December 13, 1993; and

WHEREAS, the City Council considered the Planning Commission's recommendation and public testimony in a series of public hearings as follows:

January 18, 1994  
January 27, 1994  
February 7, 1994  
March 7, 1994  
March 12, 1994 (Joint)  
March 21, 1994  
April 4, 1994

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CALIMESA DOES FIND, RESOLVE AND ORDER AS FOLLOWS:

#### A. ENVIRONMENTAL IMPACT REPORT

Section 1. The draft Environmental Impact Report prepared for the comprehensive General Plan has been completed in compliance with CEQA in that it contains a complete and accurate accounting of all environmental impacts which may be expected; considers a reasonable range of alternatives; and identifies significant cumulative and long-term impacts which may be best addressed with this general plan document.

Section 2. The EIR describes a reasonable range of alternatives to the proposed General Plan which might fulfill the basic objectives of the project. In accordance with Section 15126(d) of the California Environmental Quality Act, the City Council HEREBY FINDS and DETERMINES that the least environmentally disruptive alternative is the adoption of the proposed general plan described in Section 2 of the draft Environmental Impact Report presented before the City Council at the public hearing on April 4, 1994, and adopts the Environmental Impact Report.

Section 3. The City Council HEREBY FINDS and DETERMINES that the mitigation measures contained in the EIR represent a reasonable effort to eliminate the environmental consequences associated with implementation of the General Plan. The Council HEREBY DIRECTS that all mitigation measures indicated in the EIR be incorporated in the General Plan.

Section 4. In adopting the Environmental Impact Report (EIR), the City Council finds that despite the incorporation of mitigation measures, significant impacts related to (1) earth and geology, (2) air quality and (3) plant and animal life cannot be reduced to a level of insignificance. The City Council further finds that despite the existence of earth and geology and air quality impacts, the proposed general plan represents substantial and



overriding benefits to the public health and safety which could not be achieved in the absence of the plan, and THEREFORE ADOPTS the Statement of Overriding Considerations (SOC) contained in Exhibit "A", attached hereto and incorporated by this reference in its entirety.

Section 5. The City Council HEREBY ADOPTS the Statement of Facts and Findings in Support Thereof for the Proposed Calimesa General Plan EIR contained in Exhibit "B", attached hereto and incorporated by this reference in its entirety.

## **B. ADOPTION OF THE CALIMESA COMPREHENSIVE GENERAL PLAN**

Section 6. The City Council HEREBY APPROVES and ADOPTS the Calimesa General Plan, including text, graphics and land use map as presented at the public hearing of April 4, 1994. The Council FURTHER FINDS AND DECLARES that:

(a) Finding of Completeness and Adequacy. The adopted Calimesa General Plan constitutes a thorough and adequate treatment of the elements of land use, transportation/circulation, housing, open space/conservation/recreation, safety and noise, consistent with all requirements of State and local law.

(b) Promotion of Public Health, Safety and Welfare. The plan includes a wide variety of techniques to enhance the public health, safety and welfare, including policies and standards for land use, transportation, housing, public safety, open space, conservation and noise.

Section 7. The City Council HEREBY DIRECTS that the Calimesa Highway Access Master Plan (November, 1992) be incorporated by reference into the Calimesa General Plan.

Section 8. The City Council HEREBY DIRECTS that the City of Calimesa Master Flood Control and Drainage Plan (May 27, 1992) be incorporated by reference into the Calimesa General Plan.

Section 9. The City Council HEREBY DIRECTS that the City of Calimesa Source Reduction and Recycling Element and Household Hazardous Waste Element (September 20, 1993) be incorporated by reference into the Calimesa General Plan.

## **C. IMPLEMENTATION MEASURES**

Section 10. Notification of Public Agencies; Transmittal of Adopted Revisions to the General Plan. The City Council HEREBY DIRECTS the City Clerk to transmit one copy of the approved Calimesa General Plan to the following state, regional and county agencies as provided by law:

Air Resources Board  
California Department of Transportation  
Riverside County Department of Public Works  
California Department of Health Services  
Riverside County Planning Department  
Department of Housing and Community Development  
Office of Planning and Research  
Southern California Association of Governments

Section 11. Direction to Prepare and Publish. The City Council HEREBY DIRECTS the Director of Planning or designee to publish an amended edition of the Calimesa General Plan containing all final revisions as bound in the copy on file with the City Council and presented at the public hearing on April 4, 1994.



Section 12. Annual Report. Consistent with the provisions of State law, the Planning Director shall file an annual report with the City Council demonstrating the status of the general plan and its implementation. Upon receipt and action by the Council, one copy shall be transmitted to the State Office of Planning and Research.

Section 13. Authorization to Initiate Zoning Consistency Studies, Preparation of New Zoning and Subdivision Ordinances. The City Council HEREBY DIRECTS the Planning Department to begin the preparation of revised zoning, subdivision and other ordinances necessary to implement the Calimesa General Plan. The City Council anticipates that pending adoption of such ordinances, persons may apply for city development permits requiring a finding of consistency with both the general plan and zoning regulations. Applicants for such development permits in areas where zoning regulations are inconsistent with general plan regulations shall apply for modifications to applicable provisions of the zoning ordinance to bring it into conformity with the General Plan. The City Council shall not approve the development permit until such modification or amendment is adopted.

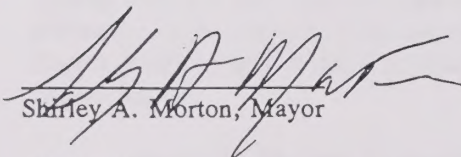
Section 14. Primacy of General Plan. The City Council HEREBY FINDS, DETERMINES AND DECLARES that the adopted Calimesa General Plan represents the City's officially adopted policy for the growth, land use, development and protection of Calimesa. In the event that the general plan is found to conflict with any City statute, ordinance, resolution, policy, rule, regulation, or action, it is the intent of the City Council that the general plan shall have precedence.

Section 15. Statement Concerning Vested Development Rights. The City Council HEREBY FINDS, DETERMINES AND DECLARES that the adoption of this general plan provides no vested rights with respect to any preceding general plan or zoning ordinance, to any owner of property not expressly protected by an existing development agreement reviewed and approved by the City Council prior to the adoption of this general plan.

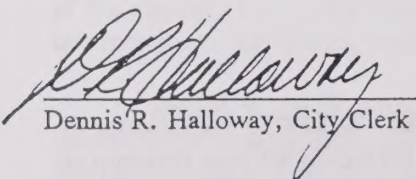
Section 16. Severability. The City Council HEREBY FINDS and DECLARES that it has adopted this general plan in its entirety. In the event that any court of competent jurisdiction declares any part of this general plan to be null and void, the remaining portions shall remain in full force and effect. The Council declares that it adopted this general plan as if it had adopted each phrase, sentence and element thereof separately.

Section 17. Passage and Adoption. The Mayor shall sign, and the City Clerk shall certify to the passage and adoption of this Resolution, and thereupon the same shall take effect and be in force.

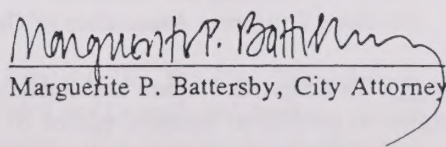
MOVED, PASSED AND ADOPTED this 4th day of April, 1994.

  
Shirley A. Morton, Mayor

ATTEST:

  
Dennis R. Halloway, City Clerk

APPROVED AS TO FORM:

  
Marguerite P. Battersby, City Attorney



STATE OF CALIFORNIA)  
COUNTY OF RIVERSIDE) SS  
CITY OF CALIMESA)

I, Dennis R. Halloway, City Clerk of the City of Calimesa, do hereby certify that the foregoing Resolution No. 94-5 was duly adopted at a regular meeting of the City Council of the City of Calimesa on the 4th day of April, 1994, by the following roll call vote:

AYES: Draeger, Hyatt, Winningham, Morton

NOES: Starrett

ABSENT: None

ABSTAIN: None

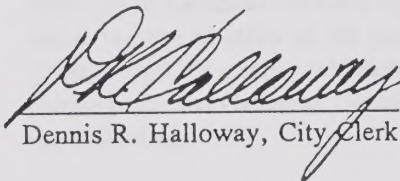
  
Dennis R. Halloway, City Clerk





EXHIBIT "A"  
STATEMENT OF OVERRIDING CONSIDERATIONS  
FOR THE PROPOSED  
CALIMESA GENERAL PLAN

As concluded in the EIR (SCH# 92-062-070) for the proposed Calimesa General Plan, all impacts, with the exception of the impacts to air quality, earth and geology and plant and animal life can be mitigated to insignificant levels. The City of Calimesa is located within a seismically active region and there are several earthquake faults crossing the City. Future development in the area would be exposed to these hazards, which cannot be totally eliminated. Also, the City of Calimesa is in a "non-attainment" basin and further contributions of air pollutant emissions to the basin are considered a significant impact. With the Calimesa area being primarily vacant at this time, there are numerous natural habitats which contain sensitive plant and animal species. Urban development in the area will result in the destruction of habitats and the disturbance or removal of sensitive plant and animal species. Measures and programs have been included in the General Plan to reduce adverse impacts on the environment on these issues, to the maximum extent feasible. But impacts on air quality, earth and geology and plant and animal life may remain significant, when considering development at buildout of the City.

The City of Calimesa, as Lead Agency and decision maker, pursuant to the CEQA Guidelines (Section 15093), after balancing the benefits of the proposed General Plan against the unavoidable environmental effects on earth and geology and air quality which remain, notwithstanding the mitigation measures and alternatives described in the Findings for the Calimesa General Plan, determines that the remaining environmental effects are acceptable due to the following:

The proposed General Plan was developed because the City recently incorporated and is required under state law to adopt and implement a comprehensive and long term general plan for the physical development of the City. Adoption and implementation of the proposed General Would be in compliance with state laws. For a new city, a General Plan is needed to provide a comprehensive policy for future planning. The General Plan would allow the City to regulate development activities in the City and provide for orderly growth and development. It will serve as a comprehensive plan designed to direct growth and preserve the rural atmosphere and existing quality of environment that residents want to protect.

The Calimesa General Plan has been designed to promote growth management; to preserve and maintain important resources in the City; to meet the needs and reflect the goals of its citizens; to protect the public health and safety of its residents; and to help improve the living environment. The proposed General Plan contains goals, policies and programs to guide future development and change. It sets a vision of what the City should be and outlines ways to fulfill that vision. The proposed General Plan will provide planning direction to City operations and programs. It will become a primary guide to public and private decision-making through goals and policies that will serve as the constitutional framework for the City.

Mitigation measures have been developed to reduce the potential impacts of future development projects allowed under the Plan to insignificant levels. Also, individual developments shall be subject to future environmental review to determine project-specific mitigation measures that may be necessary to prevent or reduce adverse environmental impacts. Air quality, earth and geology and plant and animal life impacts can be mitigated but may remain significant. These unavoidable adverse impacts are considered minor when compared to the benefits that would occur with adoption of the Calimesa General Plan.



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**EXHIBIT "B"**  
**STATEMENT OF FACTS AND FINDINGS IN SUPPORT THEREOF**  
**FOR THE PROPOSED CALIMESA GENERAL PLAN EIR**  
**(SCH# 92-062-070)**

**I. BACKGROUND**

The following findings are made with respect to the certification of the Environmental Impact Report (EIR) for the proposed Calimesa General Plan. The Calimesa General Plan would serve to guide future development in the City of Calimesa through a statement of goals, policies and programs embodied in the Land Use, Housing, Transportation, Resource Management, Noise, Safety and Air Quality Elements. The General Plan includes a Land Use Plan which designates all areas of the City for various development types and intensities and a Circulation Plan which proposes a transportation system that would support buildout of the Land Use Plan.

The California Environmental Quality Act (CEQA) and the CEQA Guidelines, promulgated pursuant thereto, provide:

"No public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding."

The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the Final EIR (Section 15091 of the Guidelines).

The Calimesa City Council is considering adoption of the proposed General Plan. Because the proposed Plan is subject to environmental review under CEQA, the City of Calimesa has prepared an Environmental Impact Report (EIR). The EIR for the Plan identified potential significant impacts which occur with future development allowed under the Plan and outlined mitigation measures to reduce these impacts to insignificant levels, where feasible. Further, the City wants to adopt the Plan and determines that the EIR is complete and has been prepared in accordance with CEQA and the CEQA Guidelines. Therefore, the following findings are set forth herein, pursuant to Section 15091 of the CEQA Guidelines.

**II. FINDINGS**

The City of Calimesa, as Lead Agency and decision maker, has reviewed and considered the information contained in the Draft and Final EIR's for the proposed Plan and the public record, and finds, pursuant to CEQA and the CEQA Guidelines, that goals, policies and programs in the General Plan must be incorporated into individual development projects, in order to avoid or substantially lessen potentially significant environmental effects as identified in the Draft EIR with respect to the areas of (a) Earth and Geology, (b) Air Quality, (c) Water, (d) Plant and Animal Life, (e) Natural Resources, (f) Noise, (g) Risk of Upset, (h) Land Use, (i) Population and Housing, (j) Traffic and Circulation, (k) Public Services, (l) Utilities, (m) Recreation, (n) Aesthetics, and (o) Cultural Resources. Future environmental review of development projects may also require project-specific mitigation measures which would prevent adverse impacts on the environment.

Specifically, the City of Calimesa makes the following findings regarding the significant environmental effects associated with implementation of the proposed Calimesa General Plan, as identified in the Environmental Impact Report (SCH# 92-062-070):

## **A. EARTH AND GEOLOGY**

### **Potentially Significant Impacts:**

The environmental impacts of new development allowed under the proposed Land Use Plan on earth and geology include exposure of structures and their users to geologic and seismic hazards present in the area. Other impacts involve the disturbance of existing soil cover and changes in the natural terrain of the area. Future development means that more people and structures will be exposed to the geologic and seismic hazards in the Calimesa area.

### **Findings:**

A number of policies and implementation programs in the proposed General Plan, in particular the Safety Element, address the geologic and seismic hazards that are present in the planning area. These policies and programs will mitigate the impacts associated with new development under the proposed Land Use Plan. The adverse impacts on earth and geology that will occur with future development are expected to be mitigated with the policies and programs in the proposed General Plan. Geologic hazards can be successfully mitigated by land use controls and building and engineering methods. Seismic hazards can be reduced to minimize injury and property damage but cannot be totally eliminated. They will remain significant in Calimesa.

## **B. AIR QUALITY**

### **Potentially Significant Impacts:**

The adoption of the proposed General Plan will permit development and activities within the project area which could generate pollutant emissions. Potential air quality impacts will be generated by public and private developments in the City. Air quality impacts will include short-term emissions associated with construction activities and long-term emissions from vehicle trips and stationary sources associated with various land uses and activities. These emissions will continue to occur with urban developments in the City.

### **Findings:**

The Air Quality Element of the proposed Calimesa General Plan contains goals, policies, an air quality plan and implementation programs which will help improve air quality in the area and reduce the emissions from existing land uses and proposed developments. Development allowed under the proposed Land Use Plan will generate pollutant emissions that will exceed established thresholds. The Air Quality Element will reduce these impacts and offset new emissions but cannot remove existing air quality violations. With existing violations of air quality standards in the Basin, new development in the City will contribute to continued violation of these standards.

## **C. WATER AND HYDROLOGY**

### **Potentially Significant Impacts:**

New Development allowed under the proposed Land Use Plan is expected to have impacts on local groundwater resources. Any additional development in Calimesa will lead to increases in water consumption. Thus, new development will result in increased pumping of groundwater resources. The depletion of groundwater resources will be dependent on the amount of recharge and on the availability of alternative water sources. Groundwater availability is a regional issue and will affect future residents of the City. Future development will reduce areas of ground percolation and recharge of the groundwater. Also, groundwater contamination may occur with new



development allowed under the proposed Land Use Plan. There are areas identified as potential flood zones and any new development within these areas will be subject to flood hazards. These areas are small scattered pockets and do not pose widespread flood hazards.

#### **Findings:**

The proposed General Plan addresses the need to conserve groundwater resources in the Resource Management Element. General Plan Policies and programs that deal with water and hydrology call for the preservation of local water resources and the abatement of flood hazards in the planning area. Water conservation measures and alternative water sources are expected to reduce the overdrafting of the groundwater. Flood hazards can be prevented through infrastructure projects and implementation of the Master Flood Control and Drainage Plan. The impacts on ground water resources can be mitigated to insignificant levels.

### **D. PLANT AND ANIMAL LIFE**

#### **Potentially Significant Impacts:**

New Development in the City could have adverse environmental impacts on existing biological resources. Development of the City's large vacant areas will lead to the loss of native plant and animal communities. Rare, endangered, and threatened plant and animal species will be destroyed by urban development. Adverse impacts would include the removal of native vegetation, destruction of wildlife habitats, and the disturbance of sensitive species throughout the planning area. Destruction of existing vegetation in currently open areas would limit the range of plant and animal life in Calimesa. There are many sensitive plant and animal species which may be destroyed by urban development. Disturbance of existing habitats could further endanger sensitive plants and animal species.

#### **Findings:**

Policies and implementation programs in the Resource Management Element have been developed to protect biological resources. The preservation and conservation programs in the Resource Management Element will help protect sensitive species. Significant impacts on sensitive plant or animal species are expected to be mitigated with implementation of the policies and programs in the General Plan. But urban development in the City is expected to significantly reduce native vegetation and natural habitats in the area. These impacts can be reduced but may remain significant, due to the presence of numerous sensitive species in the area.

### **E. NOISE**

#### **Potentially Significant Impacts:**

Future development in Calimesa will lead to short-term noise impacts associated with demolition, excavation, earth-moving, and construction activities. These impacts will include noise from construction crews and equipment. Long term noise impacts will come from vehicles, train activity, industrial processes and equipment, large group events, and concentrated business activities. These would be found along major roadways, the railroad tracks, industrial areas, commercial areas and places which can accommodate large groups of people. The primary source of noise in Calimesa is expected to come from traffic on the Interstate 10 and major roadways. Increased traffic on roadways will result in increased noise levels in the City.

#### **Findings:**

The major goal of the Noise Element is to prevent the creation of noise problems in the City and to mitigate existing noise sources. Policies and implementation programs in the Noise Element will serve to reduce future noise impacts in the planning area. While extreme noise impacts will be prevented, through identified programs, ambient noise

levels are expected to be greater at buildout than existing levels. The increase will be incremental over a long period of time and most likely to be imperceptible. Thus, noise impacts from future development can be mitigated to insignificance with implementation of the identified noise reduction and mitigation programs.

## **F. LIGHT AND GLARE**

### **Potentially Significant Impacts:**

Development allowed under the proposed Land Use Plan will result in greater intensity and density of development in the City. New development will create new sources of light and glare. Artificial lighting will accompany all new development. This includes exterior lighting for parking lots, signs, fields, walkways, and interior lighting which could be visible outside. Thus, the City will experience increased lighting with future development. High intensity structures will also cause spillover light to adjacent lots. Glare from reflective surfaces will occur with developments that use mirrors, bright lights, and other reflective surfaces for building facades. Light and glare are likely to be concentrated within the commercial and industrial sections of the City. The development of vacant lots and hillside areas will increase the nighttime lighting levels in the City. Shade and shadow impacts will also occur on adjacent developments, if new structures are taller, more massive, or located near each other. Street lighting on roadway projects could increase lighting levels in the City.

### **Findings:**

The light and glare, and the shade and shadow impacts of new development can be prevented through design review. Light and glare impacts are often site specific and will require project-specific review to prevent future light and glare impacts. These would include setbacks, landscaping, lighting plan, building materials, and other measures that would reduce spillover light to adjacent uses. Thus, while new sources of light and glare cannot be prevented with new developments, their adverse impacts can be mitigated to levels of insignificance through design review and project-specific measures.

## **G. LAND USE**

### **Potentially Significant Impacts:**

The proposed Calimesa General Plan includes a Land Use Plan which will be the primary cause of land use changes because it regulates the type of land uses in the City. Buildout of the City will mean the loss of large vacant areas in the City and the increase in development density and intensity throughout the planning area.

### **Findings:**

While the Land Use Plan for the City will serve as the primary instrument for controlling future development in the City, there are policies and implementation programs in the Element which prevent land use incompatibilities and conflicts. Also, there are policies and programs in the other elements of the proposed General Plan which address the prevention of land use impacts. The proposed Land Use Plan itself has been designed to provide for the best land use pattern in the City and to prevent adverse impacts on land use. Also, programs have been developed to minimize the disruption of the rural character of the City. The changes in existing land uses with buildout of the City are not expected to result in land use conflicts or incompatibilities. While the urbanization of vacant and undeveloped areas may be considered significant, they need not necessarily be adverse.



## **H. NATURAL RESOURCES**

### **Potentially Significant Impacts:**

Development allowed under the proposed Land Use Plan could identify the presence of natural resources, require the commitment of natural resources, limit access to existing resources, or cause damage to existing resources. Specific impacts will depend upon individual development projects as they occur under the proposed General Plan. Open space areas in the City will be lost when development occurs, except for areas designated and preserved as open space. Development will commit aggregate resources (sand and gravel), power (fossil fuels), natural gas, water, wood and other natural resources for construction and operation. The impacts of the commitment of aggregate resources for construction will be incremental until buildout of the planning area.

### **Findings:**

The protection and conservation of natural resources is addressed in the Resource Management Element. The Resource Management Element (RME) contains a conservation program for the area's identified natural resources (water, biological, land, cultural, and energy resources). With development occurring individually and over a long period of time, the impacts on natural resources will not be significant or adverse. Where significant adverse impacts are expected, they can be mitigated to levels of insignificance by policies and programs in the proposed Calimesa General Plan.

## **I. RISK OF UPSET/HUMAN HEALTH**

### **Potentially Significant Impacts:**

Future development allowed under the proposed Land Use Plan will be exposed to existing wildfire and urban fire hazards in the planning area. At the same time, they may also create fire hazards to adjacent developments. Certain areas of the City are susceptible to brush fires due to their proximity to dry brush areas and chaparral, steep slopes, and difficult fire access. Urban fires may result from faulty electrical systems, accidents, hazardous material spills, and other activities which involve open flames and fires. Development allowed under the proposed Land Use Plan will increase the number of residents and structures that will be exposed to fire hazards in the planning area. Hazardous materials will also continue to pose threats to public safety in the future and new development will be exposed to these hazards. Also, new development may involve hazardous materials use or generation which could increase safety hazards in the City.

### **Findings:**

There are regulations at all levels (federal, state, city, special district) which protect public health and prevent threats to the safety of individuals. Also, the proposed General Plan promotes the health and safety of Calimesa residents over any other goal. The Safety Element of the General Plan addresses the potential for disaster in the planning area. The Public Safety Plan and programs provide ways to prevent and protect residents from existing hazards in Calimesa. Policies and implementation programs which are designed to reduce risks and hazards to human health and to increase public safety in the City. The potential impacts on human health that may occur with new development can be mitigated by programs in the proposed Calimesa General Plan, as well as by State, federal and regional laws. These impacts are expected to remain at insignificant levels. The potential for disaster brought by new development under the proposed General Plan will be mitigated by the programs in the Plan. No significant adverse impacts will occur with implementation of the safety programs and measures in the General Plan.

## **J. POPULATION/HOUSING**

### **Potentially Significant Impacts:**

The proposed Land Use Plan contains approximately 5,872.54 acres designated for residential uses. This land could accommodate up to 20,356 dwelling units at buildout. The population impacts of the proposed General Plan will include an increase in residents and employees that will accompany new development allowed under the proposed Land Use Plan. New residential development will add approximately 17,225 dwelling units to the existing housing stock. This will bring a housing capacity of 20,356 units and 23 million square feet of commercial, industrial, and other non-residential development at buildout. Future development will result in population growth in the area due to the emigration of people into the City. Assuming an average household size of 2.4 persons per household (1993 DOF estimate), there could be as many as 48,854 residents in the City at full occupancy. This is nearly seven (7) times the existing population of the City.

### **Findings:**

Mitigation measures to reduce population impacts are embodied in policies and programs of the proposed Calimesa General Plan. They include policies and implementation programs to ensure that housing and services are adequate to handle future increases in population, and that all residents are served to meet their needs and interests. The main purpose of the Housing Element is to ensure the provision of adequate housing for all residents of the City. The Housing Program in the Housing element identifies ways in which the City shall implement this goal. Thus, any impact on housing that will be brought about by future development can be mitigated by policies and programs in the Housing Element. Potential housing development and population growth that can occur with new development under the proposed General Plan represents a significant increase in the existing housing stock and population. This impact will occur slowly within the projected time-frame to reach buildout. It may not be adverse if adequate public services and housing are available at each period of growth. The programs identified in the Plan will reduce future population impacts to insignificance.

## **K. TRAFFIC AND CIRCULATION**

### **Potentially Significant Impacts:**

The environmental impacts of future development, as allowed under the proposed Land Use Plan, include increases in the number of vehicle trips to and from the City and added congestion along City Streets. Trips from existing and future land uses in the City were estimated at over 200,000 trips by 2010. These will require new and improved roadways to prevent congestion and maintain acceptable levels of service.

### **Findings:**

The Circulation Plan in the Transportation Element will accommodate future traffic volumes. Development and improvement of roadways to meet the needs of future development will ensure that roadway service levels remain acceptable (LOS C or better). Aside from the Circulation Plan, the Transportation Element of the proposed Calimesa General Plan contains policies and implementation programs (Truck Route Plan, TDM, County CMP, Highway Access Master Plan, Public Transportation, Intersection Design Standards) which outline ways to address the traffic and circulation needs of Calimesa. While the proposed Circulation Plan may have environmental impacts on other issue areas, it serves as the major mechanism for ensuring that future traffic in the City will be handled by an adequate circulation system. The policies and programs in the Transportation Element and other elements of the proposed General Plan which address traffic concerns will reduce the impacts caused by future increases in traffic volumes on City streets. As indicated, levels of service will improve to "C" with the proposed mitigation. Thus, traffic and circulation impacts are expected to be reduced to insignificant levels.



## **L. PUBLIC SERVICES**

### **Potentially Significant Impacts:**

Future development in the project area will require the provision of public services and infrastructure such as fire protection, police protection, school services, library services, and other governmental services. While Calimesa has these services, future development will require the expansion of service areas and increases in staffing and equipment in order to meet the greater demand. The demand for fire protection is directly related to the presence of fire hazards and emergency situations in the planning area. Crimes, traffic and traffic accidents will increase proportionally with the increase in population. Adjustments in fire and police department staffing and equipment will be necessary as new development occurs in the City. School services will need to be augmented with increases in population in the planning area. Approximately 16,285 students will be residing in Calimesa at buildout. The increase in population that will accompany future development under the proposed Calimesa General Plan will also increase the demand for library services.

### **Findings:**

The impacts of new development on public services may be reduced through policies and implementation programs that call for the provision of adequate public services to serve new developments in the City. The impact of new development on public services can be mitigated with programs in the proposed Calimesa General Plan. Timely provision of services as development takes place will prevent deterioration in existing service levels or inadequate services. Impacts are expected to be insignificant after mitigation.

## **M. ENERGY AND UTILITIES**

### **Potentially Significant Impacts:**

New development allowed under the proposed Land Use Plan will require additional power resources. Short term demand for power will also occur for individual construction projects in the City. Natural gas consumption will increase with new development and the increase in residents and employment opportunities. The increase in population will mean an increase in water consumption. Overdrafting of the groundwater can lead to the deterioration of water quality, depletion of resources and increase in water delivery costs. New development will also result in additional sewage generation and the need for sewer service. Water conservation measures can reduce the amount of sewage generation. There are areas where storm drain facilities need to be provided/improved to eliminate flood hazards. Undeveloped areas will require new storm drain facilities when development occurs. These facilities shall be designed and provided with future development. New structures and the paving of vacant land will increase storm runoff and may require the upgrade of drainage pipes downstream. New development and the increase in population and employment in the City of Calimesa will lead to increases in solid waste generation. New development in the City will require telephone and cable television services. This will mean the extension of existing lines in the area and upgrade to existing facilities.

### **Findings:**

Adverse impacts on energy and utilities can be mitigated by policies and programs that deal with the provision of adequate infrastructure and utility services. The impact of new development on energy and utility services can be mitigated with programs in the proposed Calimesa General Plan. The expansion of infrastructure and facilities to meet the demand of individual developments will ensure that essential utility services are available at all times. Water and energy conservation and waste reduction programs will help reduce adverse impacts to insignificant levels after mitigation.

## **N. AESTHETICS**

### **Potentially Significant Impacts:**

Future development under the proposed Calimesa General Plan will lead to greater suburbanization of the area. Changes in the visual quality of streetscapes and skylines will occur as vacant areas are developed and existing structures are replaced with new ones. Views of the surrounding hills could also change as development occurs within the hillsides and tall and massive structures block views of the hills. Future development at buildout of the area represents a substantial increase in urban development which would provide the City with a suburban character. Roadways built under the Circulation Plan would also increase the urban quality of the area. Hillside developments could reduce the sense of openness and the rural quality of the area.

### **Findings:**

Many policies and programs in the proposed Calimesa General Plan address the visual and aesthetic qualities of the environment. These will serve as mitigation measures for the aesthetic impacts of future development under the Plan. The aesthetic and visual impacts of new development will change the visual character of the City. These impacts will not be adverse or significant with implementation of the programs in the General Plan.

## **O. RECREATION**

### **Potentially Significant Impacts:**

The increase in local population will increase the demand for recreational opportunities and facilities in the area. Approximately 1,916.66 acres of open space have been designated in the proposed Land Use Plan. This will provide for the recreational needs of existing and future residents. The estimated maximum buildout population of the City is 48,854 persons. At a set ratio of five (5) acres per thousand population, approximately 245 acres will be needed for parks at buildout of the City. The development of parks and recreational facilities should accompany new development to meet its demand.

### **Findings:**

The Resource Management Element deals with open space and recreation issues in the City. It provides for the development of a master plan for parks and recreation facilities and contains policies and implementation programs that will alleviate future impacts on recreation services and facilities. Also, a Bikeway Plan has been developed to create a system of bicycle paths and trails in the City. The need for parks and recreation facilities, as created by future development and population growth, can be served as areas designated as parks are developed and new parks in the City provided concurrent with new residential development. Impacts will remain significant as long as existing park facilities are maintained and new ones develop as the need arises.

## **P. CULTURAL RESOURCES**

### **Potentially Significant Impacts:**

Future developments allowed under the proposed Land Use Plan have the potential to affect existing historic, archaeological and paleontological resources. The San Timoteo Canyon area is especially sensitive for archaeological and paleontological resources. The area may contain other archaeological/paleontological resources, aside from those recovered in the past. Historic structures are found in scattered areas of the City. Thus, new development in the City of Calimesa may lead to the disturbance, destruction or discovery of cultural resources. Higher intensity development often means more on site excavation and grading. Grading for hillside developments may uncover paleontological resources. Redevelopment and recycling could result in the demolition of historic structures. These can lead to adverse impacts on the area's cultural resources. Because of the site-specific nature



of these resources, it is difficult to determine if actual adverse impacts will occur until project sites have been chosen and development projects proposed.

#### **Findings:**

Policies and programs that will help preserve the paleontological, archaeological and historical resources in the City are found in the Resource Management Element. Impact levels will be insignificant with implementation of the proposed conservation/preservation programs.

### **III. ALTERNATIVES TO THE PROPOSED PROJECT**

In considering a project, the California Environmental Quality Act requires that alternative projects be considered. These alternatives describe a range of reasonable alternatives to the proposed General Plan. A number of alternatives to the proposed Calimesa General Plan were considered. These include:

#### **A. NO PROJECT ALTERNATIVE**

The No Project Alternative considers the continuation of existing conditions, with no future development in the City. This assumes that no new development will occur and conditions will remain as is. This alternative assumes that the proposed General Plan will not be adopted.

#### **Findings:**

While this alternative is environmentally superior because it will have no new environmental impacts in the City, it is unlikely to reflect the future of Calimesa. This alternative is unrealistic, because it assumes that no growth will occur in Calimesa and everything will stay as is. This could be possible if the City adopted a "no growth" policy and designated the City according to all existing land uses. No development would occur within the Oak Valley Specific Plan area or any other approved project. This alternative represents a taking of property rights because it will not allow any development in the City.

#### **B. COUNTY ZONING ALTERNATIVE**

Another alternative is equivalent to the use of the Riverside County General Plan. This means that the proposed General Plan will not be adopted and all future developments shall occur in conformance with the County General Plan for the area. Since a Land Use Plan for the area has not been adopted, the zoning designations have been used to regulate land use types and densities. Thus, this alternative will mean future development according to the County Zoning.

#### **Findings:**

While the County Zoning can be utilized to regulate land uses in the City, the goals, policies and programs in the County General Plan need to be revised to better reflect existing conditions and concerns. Also, new laws have been established which require changes in the formulation of general plans. Thus, the existing Plan does not address the needs of Calimesa residents in particular and state requirements for the new city.

#### **C. LOW DENSITY ALTERNATIVE**

The Low Density Alternative considers the adoption of the proposed General Plan with lower residential densities in the Land Use Plan. This means that residential areas in the eastern portion of the City will have lower allowable densities than proposed under the draft General Plan. This Alternative maintains the specific plan designations within the Oak Valley Specific Plan area but designates other residential areas for lower density development. This alternative will limit the residential unit capacity of the area and result in a lower development buildout.

## Findings:

While this Alternative may have less environmental impacts than the proposed Plan, it limits housing development potential in the City. It would also not meet the goals and policies of the proposed General Plan. The lower densities in outlying areas are not supported by the constraints and development potential of these sites. Also, these outlying areas would have densities that would be lower than those allowed in similar areas in the City.

## D. ALTERNATIVE SITE

An alternative site for the Calimesa General Plan would be another site in the county or a smaller or larger site, which could benefit from the General Plan.

## Findings:

An alternative site for the proposed General Plan is not appropriate because the proposed General Plan has been specifically tailored for the needs and resources of the City of Calimesa. An alternative site will have different characteristics, opportunities and needs which would make the proposed Plan inappropriate and useless. Also, the City of Calimesa has no authority outside of its corporate boundaries. As a City-wide plan, the proposed Calimesa General Plan cannot have an alternative site location.

## IV. MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) was amended in 1989 to add Section 21081.6 (to implement Assembly Bill (AB) 3180), which requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed developments. As stated in Section 21081.6 of the Public Resources Code,

*"...the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment."*

The implementation programs under each element of the proposed Calimesa General Plan outlines specific actions that the City shall undertake within the next 20 years. As required by State law, the City shall review its progress on implementation of the General Plan on an annual basis. This yearly review will serve as the primary monitoring program for ensuring that the policies and programs of the proposed General Plan are implemented. General Plan amendments shall also be made in accordance with State law. Individual projects that are approved under this General Plan shall be evaluated in light of the EIR for the General Plan, and additional environmental review undertaken in accordance with the requirements of CEQA.

For individual developments, the following guidelines for mitigation monitoring shall be complied with:

### Mitigation Plans

For each development, public improvement or other project in Calimesa, the City shall require the developer or proponent to prepare and submit to the City for its approval, Mitigation Plans for the proposed project. The Mitigation Plan shall set forth the specific manner in which the mitigation measures imposed upon the project shall be implemented, and a time schedule under which the mitigation measures will be implemented for all mitigation measures designated as the developer or proponent's responsibility in the development. Such mitigation measures shall include compliance with the goals, policies and programs in the Calimesa General Plan, as well as additional mitigation imposed by the City for each site-specific project.



## **Monitoring Program**

It shall be the responsibility of the City to carry-out the Mitigation Reporting and Monitoring Program by imposing the requirements upon each individual development and public improvement project to be implemented pursuant to the Calimesa General Plan. All mitigation measures required of a site-specific project shall be included in, and made a condition of approval of, each development, participation or public improvement contract as appropriate.

## **Mitigation Monitoring Program Agreement**

The City may require an agreement from a project applicant for specific development projects specifying the applicant's responsibility for the Mitigation Reporting and Monitoring Program, including penalties for noncompliance and financial security arrangements. The project applicant's responsibilities for monitoring the reporting on the status of implementation of specific measures will also be included in this agreement, as will any other relevant issues identified by the City.

## **Other Agencies**

Monitoring of mitigation measures requested by other agencies will be the responsibility of the requesting agency. The City will notify these agencies which mitigation measures requested by these agencies have been included as a condition of project approval. The agencies will then submit a proposed monitoring program to the City. These agencies will inform the City in writing when monitoring is complete.

## **Processing Fee**

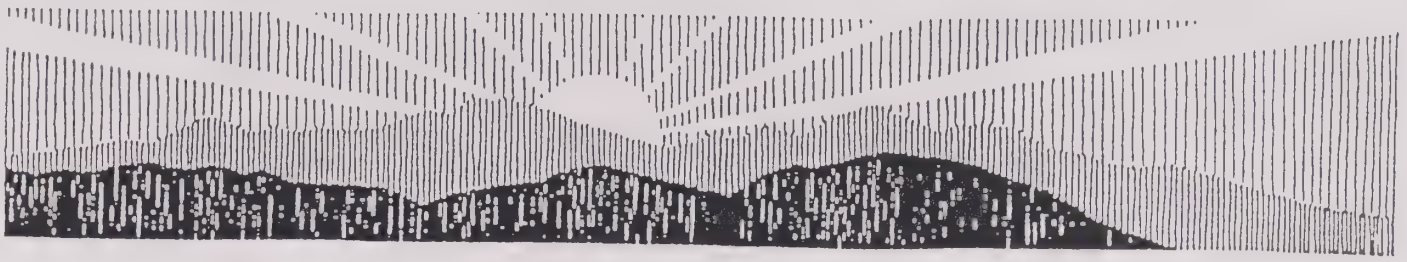
The City may charge a fee equal to the actual cost to the City of monitoring all mitigation measures for a site-specific development project as described in each monitoring program.

## **Outside Consultants**

The City may hire an outside consultant for cases in which compliance with a mitigation measure cannot be verified through the plan check process or city-established inspection process, or requires specialized expertise. The cost associated with services of outside consultants shall be paid by the project applicant.







**PART I**  
**PROFILE REPORTS**  
**CITY OF CALIMESA**





**PROFILE REPORTS  
FOR THE  
CALIMESA GENERAL PLAN**

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Prepared for:

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April 4, 1994





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## INTRODUCTION

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The Profile Reports for the Calimesa General Plan provide a discussion of existing conditions in the City. The reports serve as background information on issues and opportunities that need to be considered in planning and the formulation of the General Plan. By identifying the needs and resources of the City, city staff, the General Plan Advisory Committee, the Planning Commission and the City Council have a broader insight into the constraints and opportunities that need to be addressed in the General Plan. Together with the citywide survey, city decision-makers are in a better position to meet and provide for the needs, interests and preferences of the residents.

The Profile Reports are separated by General Plan Element (Land Use, Transportation, Housing, Resource Management, Public Safety, Noise, and Air Quality) in order to easily identify issues that need to be addressed in each Element. Where there are overlapping concerns, references are made to the Profile Report which has the more extensive discussion.

Aside from the General Plan formulation, the Profile Reports may be used by the City as a Master Environmental Assessment. It can serve as a baseline condition in evaluating how proposed developments would change existing conditions in the area and what resources they are likely to impact. Because of the nature of the data in these reports, it is necessary to update some information on a more regular basis than others. Thus, while soil resources, geologic characteristics, and water resources need not be reviewed unless new studies are completed, population and housing stock and traffic volumes are likely to require constant updates. Also, some reports provide more detailed information and are more in depth than others. This is to comply with specific requirements in state law regarding General Plan development.





## SECTION 1: LAND USE

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### INTRODUCTION

The Land Use Profile Report discusses the location and distribution of existing land uses, summarizes existing land use plans for the City, and identifies land use trends in the area. This report also identifies development constraints affecting existing and future development.

The City of Calimesa is located within the eastern portion of Southern California's inland valley, within the Yucaipa Valley of the San Gorgonio Pass Area. The Yucaipa Valley area is naturally divided into three mesa-like areas: the North Bench (still referred to by its geographical name), the Middle Bench encompassing central Yucaipa, and the South Bench, covering Calimesa. The San Bernardino Mountains and the Crafton Hills surround Calimesa to the north and west. The San Jacinto Mountains and the San Timoteo Badlands border the City to the east and south, respectively.

San Bernardino County and the City of Yucaipa are located on the northern side of Calimesa and County Line Road, directly north of the City limits. The Cities of Beaumont and Banning, and the community of Cherry Valley are located east of Calimesa and the San Timoteo Badlands are located east and south of the City. Regional access to Calimesa is provided by Interstate 10 and State Route 60, which join east of Calimesa in the City of Beaumont (see Exhibit 1-1). The City covers approximately 14.8 square miles, with a sphere of influence covering another 15 square miles west and east of the City. Exhibit 1-2 is a vicinity map of the area.

Development in the Calimesa area began in 1769 with the inception of the Spanish missions in Alta, California. Captain Juan Bautista established a land route through the San Gorgonio Pass area to these missions in 1774. Development in the area expanded when the railroad companies first surveyed the area in the mid-1850's and several stage companies attempted to establish regular routes. The Calimesa community established a separate identity from the City of Yucaipa following with the completion of Highway 99, (presently Interstate 10), and the establishment of commercial businesses and a post office along that route.

Citizens formed the Calimesa Improvement Association in 1940, with the intention of developing and improving the Calimesa community. In the early 1960's, the Association became the Calimesa Chamber of Commerce, with the additional objectives of promoting the community, and listening to resident's concerns. The Chamber was an active participant in the Riverside County service efforts to form a County Service lighting district in 1966, and a County Parks and Recreation Service area between 1968 and 1970. Following the sale of two large dairy ranches for development, and completion of a sewage treatment plant, Calimesa began to experience rapid population growth and accompanying development. The approval of the Oak Valley Specific Plan, occupying nearly 7,000 acres of land west of Interstate 10 and approximately 4,100 acres of land within Calimesa, strengthened incorporation efforts. The community of Calimesa proposed dissolution of its 2 County Service areas, and detachment of a third to the Local Agency Formation Commission in April 1990. Incorporation was recognized on December 1 of that year.

## EXISTING LAND USES

Calimesa is primarily a low density residential community with older subdivisions occupying the northcentral portion; new subdivisions oriented around the Calimesa Golf and Country Club; and mobile home developments scattered throughout the City. Commercial and manufacturing activities border Calimesa Boulevard and County Line Road, with the industrial uses extending east on Myrtlewood and Avenue L West. Public facilities are located mainly on Park Avenue. Open space areas are located primarily west of Interstate 10, although there are large pockets of vacant land east of the freeway and near the developed areas of the City on the northeast. Outlying areas remain largely rural and agricultural. Existing land uses are shown in Exhibit 1-3 and summarized in Table 1-1 below.

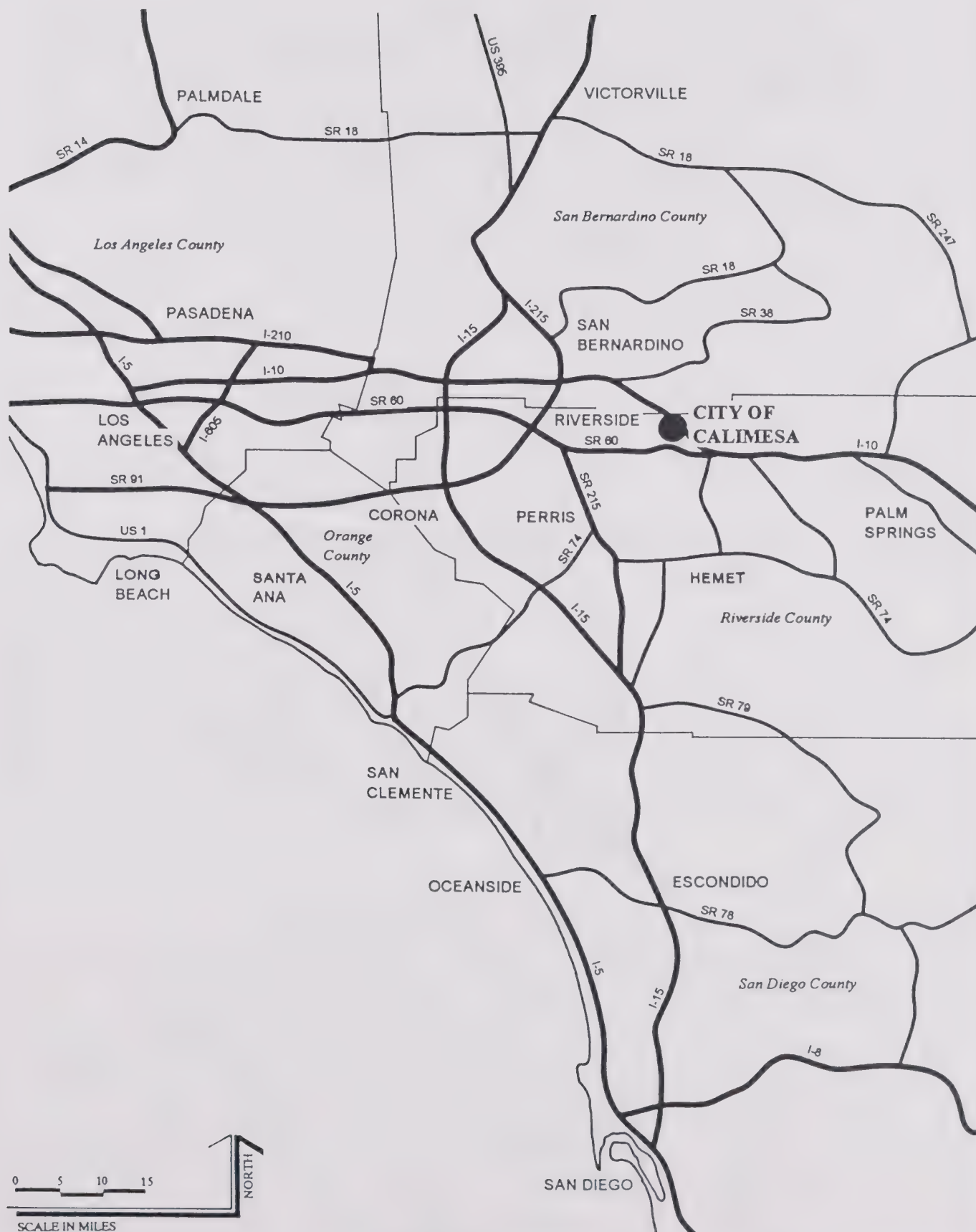
### Residential Development

Single family residential areas covering approximately 1,187 acres, are generally located in the City's northeast section, and bounded by County Line Road and Crow Street to the west, Holmes Street to the east, and Mesa Grande to the south. Older single family residences (developed prior to subdivision regulations) occupy irregular lots between County Line Road and Myrtlewood Drive. Many of these residences include small shelters and feeding areas for livestock. Newer single family homes and condominium subdivisions are found south of Myrtlewood Drive, overlooking the Calimesa Golf Course and Country Club. Rural residential development consisting of single family homes and larger agricultural ranches are generally located south of Chandler Road. Multi-family developments are found near the City center and occupy approximately 11 acres.

The eastern portion of Calimesa is occupied by the Oak Hills Estate community, and low density residential development. Mobile home developments are interspersed at various locations throughout the City and cover approximately 143 acres. Three of the largest mobile home developments are the Sharondale, Plantation on the Lake, and Rancho Calimesa Mobile Home Parks.

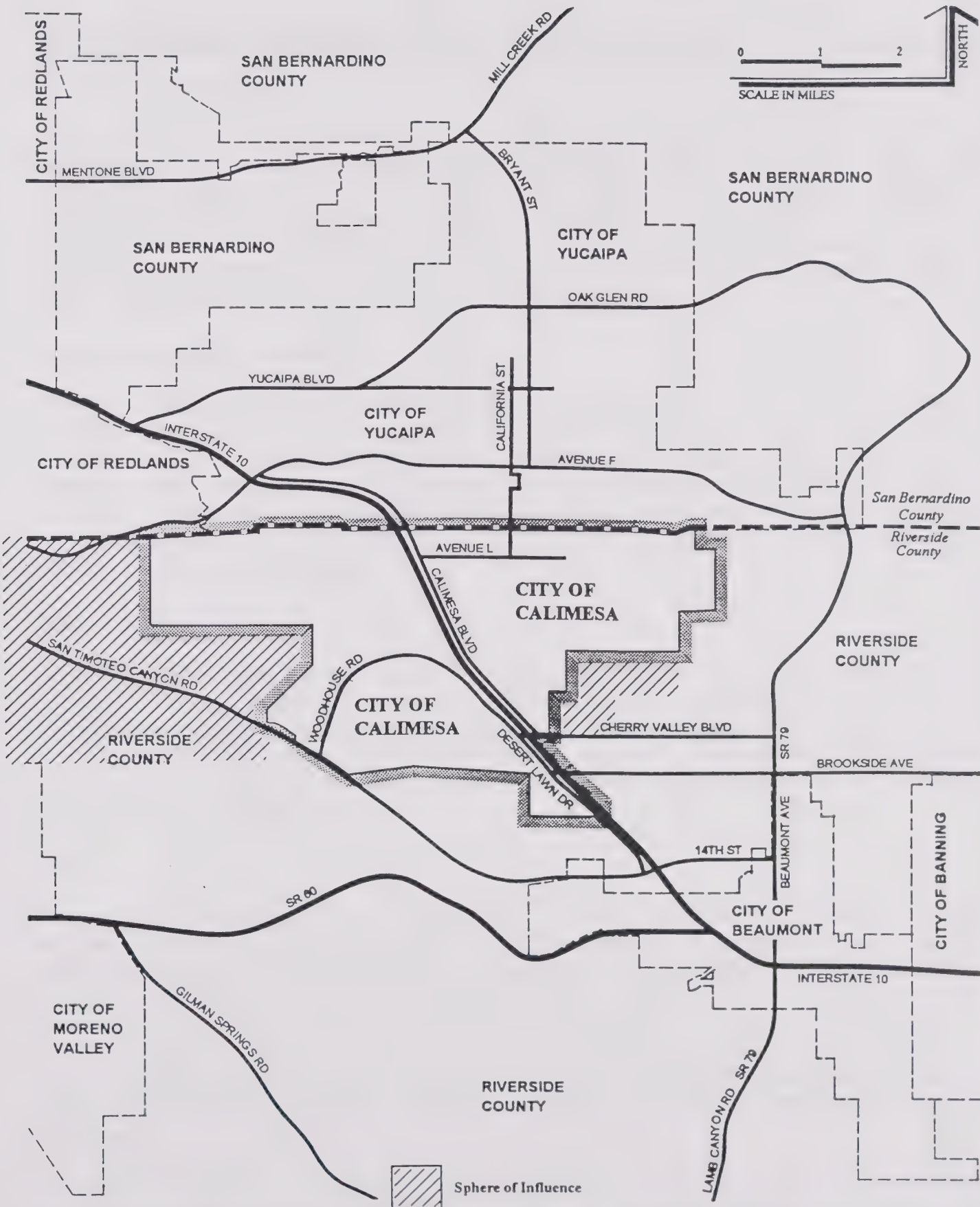
### Commercial Development

There is limited commercial development in Calimesa, generally located along Calimesa Boulevard and County Line Road. Strip commercial uses covering 51.69 acres include family-owned retail stores, motels, and auto repair shops, and state and national chains such as Stater Brothers, Bank of America, McDonald's, and 7-Eleven Food Store. Many of the family-owned businesses, occupy 30 to 40-year old residences converted to allow commercial operations, or single story general commercial buildings constructed during the 1950's and 1960's. In addition, recently constructed, theme-oriented, modest-sized commercial developments include Crown Village and Terra Cotta Center. Agricultural operations may be found on the flatter terrain areas within Oak Valley and covers approximately 338 acres.













## **Industrial Development**

Industrial development in the City is located on Calimesa Boulevard between Interstate 10 and Fifth Street and along the western ends of Fifth Street and Myrtlewood Drive. Covering approximately 44.89 acres, and interspersed between commercial development, typical industrial development includes machine shops, custom furniture design, and construction services occupying single-story warehouses constructed during the 1960's. Larger, more recent industrial development, including commercial storage facilities, consists of two-story, warehouse buildings with adjoining equipment yards. Approximately 20 acres of land is devoted for open storage.

## **Open Space/Recreation Facilities**

Open space areas consist of undeveloped land preserved as open space, and maintained community and neighborhood recreational areas, covering approximately 179 acres. Maintained open space includes the Calimesa Channel, Calimesa Creek, Garden Air Wash and other intermittent stream channels extending west from north and central Calimesa, the Calimesa Golf and Country Club on the eastern central portion of the City; the Southern California Edison easement along the southwest border of the City, bikeways and trails through the north central and northeastern portions of the City, and scattered agricultural properties.

## **Public Facilities**

Public facilities are defined as land in public ownership, excluding parks. There are approximately 3.05 acres of public facilities in Calimesa, including City Hall, Fire Station No. 21, the Norton Younglove Senior Multipurpose Center, the Calimesa Post Office, and local churches. The Calimesa City Hall, the fire station, and the senior center are adjacent to each other on Park Avenue. Institutional uses in the City include the Mesa Grande School, local churches and the Cemetery. They occupy approximately 99 acres.

## **Streets**

There are approximately 26 miles of roadways in the City. These street rights-of-way and the Interstate 10 freeway cover 5.3 percent of the City's land area, or 501 acres. The street system is defined by County Line Road which serves as the northern entry to the City and collects residential and commercial traffic; Avenue L West, which collects residential traffic; and Calimesa Boulevard which serves as the backbone of the City's commercial district. Interstate 10 provides regional access to County Line Road, 5th Street/7th Street, Singleton Road, and Cherry Valley Boulevard. Other collector streets have one lane in each direction, including 4th Street, 3rd Street, 2nd Street, California Street and Fremont Street. The Circulation Profile Report details the transportation system in the City.

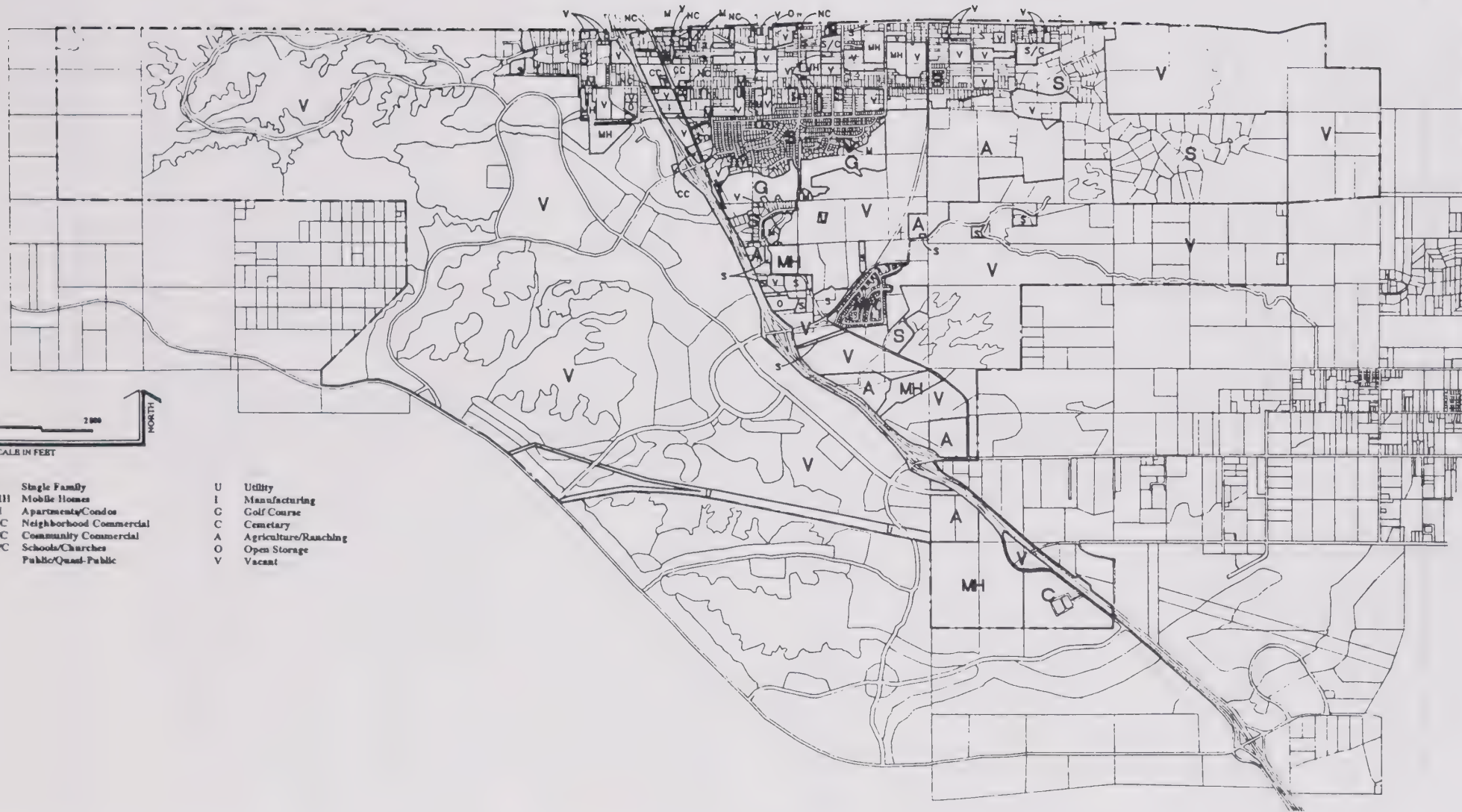
## Vacant Areas

Approximately 6,913 acres (72.8% of the City's land area) remains as privately owned vacant land. Except for a few dairy ranches, the project site of the Oak Valley Specific Plan area which includes approximately 3,932 acres (41.4% of City lands) accounts for the largest amount of existing vacant land. Other sizable vacant lands include areas southeast of the country club, areas east of Calimesa Boulevard between Chandler Avenue and the City's southern boundary, and undeveloped portions of Oak Hills.

TABLE 1-1 EXISTING LAND USES		
Land Use	Acreage	Percent
Single-family Residential Areas	1,190.65	12.55%
Multi-Family Residential Areas	13.77	0.15%
Mobile Home Parks	313.83	3.31%
Neighborhood Commercial Areas	14.27	0.15%
Community Commercial Areas	38.64	0.41%
Institutional (Church, School, Cemetery)	99.47	1.04%
Public (City Hall, Post Office, Tire Station)	3.05	0.03%
Industrial Areas	37.91	0.40%
Open Storage	19.22	0.20%
Agricultural Areas	366.16	3.86%
Vacant Areas	6,503.42	68.53%
Open Space (Golf Course, SCE ROW)	186.83	1.97%
Streets & Freeway	703.02	7.40%
TOTAL	9,490.25	100.00%
Source: David Evans and Associates, Inc. 1993.		

## Recent Developments

The north central portion of Calimesa, extending between Interstate 10, County Line Road, Fremont Street and the Calimesa Golf and Country Club contains most of the urban development in the City. New residential subdivisions and supporting neighborhood level goods and service shops, the City







Hall, and the senior center are found in this area. Developments in the City include Oak Hills Estates, the Buena Mesa neighborhood, the Sharondale Mobile Home development, Plantation on the Lake, and Sundar Homes.

Recent development projects in Calimesa include infill residential development on vacant lots between County Line Road and Myrtlewood Drive and clustered retail development near Calimesa Boulevard, and professional offices at the City's commercial areas. The Oak Valley Specific Plan was approved in 1988, but no development has occurred on site.

## LAND USE CONTROLS

The Zoning Ordinance and Zoning Map are the primary implementation tools of the Land Use Element. The Zoning Map and Zoning Ordinance identify the specific land uses allowed in the City and sets forth regulations and standards for development consistent with the goals, policies, and objectives of the General Plan. Upon incorporation, the City of Calimesa adopted the Riverside County Zoning Ordinance. In February 1991, the City amended its zoning ordinance which resulted in deletion of several zone districts, to more closely reflect Calimesa's existing and planned development.

The City of Calimesa has 4 agricultural zone districts, 6 residential districts, 3 commercial districts, 3 manufacturing districts, and 1 controlled development district. These districts are listed in Table 1-2.

TABLE 1-2 ZONE DISTRICTS		
Zone		Permitted Uses
Light Agricultural	A-1	Field crops, orchards, farm stock or animal grazing, water works facilities, farms, or temporary stand
Agricultural-min. 2 acre lots	A-1-2	Field crops, orchards, farm stock or animal grazing, water works facilities, farms, or temporary stand on a minimum acre lot
Agricultural-min. 5 acre lots	A-1-5	Field crops, orchards, farm stock or animal grazing, water works facilities, farms, or temporary stand on a minimum 5 acre lot
Residential Agricultural	R-A	Farms, non-commercial keeping of horses, cattle, sheep, poultry and rabbits for occupants use, kennels and catteries
One Family Dwellings	R-1	One-family dwellings, public parks and playgrounds, golf courses, country clubs, planned residential developments

**TABLE 1-2  
ZONE DISTRICTS**

Zone		Permitted Uses
Multiple Family Dwellings	R-2	One family dwellings, two family dwellings, apartment houses, churches, educational institutions, public libraries
Multiple Family Dwellings, 4,000 sq. ft. lot size	R-2-(4,000)	One family dwellings, two family dwellings, apartment houses, churches, educational institutions on a minimum 4,000 square foot lot
General Residential	R-3	One family dwellings, two family dwellings, apartment hoses, nonprofit clubs, motels, nursery schools, medical and dental offices, law offices, real estate offices
Mobilehome Subdivision and Mobilehome Park	R-T	One-family mobilehomes w/floor area not less than 450 square feet, and one-family factory built and conventional dwellings w/ floor area not less than 750 feet, community recreation facilities as part of the subdivision development
General Commercial	C-1; C-P	Bakeries, banks, service stations. retail stores, laundries, food markets, tire sales, and similar uses
Scenic Highway Commercial	C-P-S	Bicycle sales, electrical substations, hardware stores, mobilehomes, nurseries, wedding chapels, recycling collection facilities, convenience stores
Manufacturing-Service Commercial	M-SC	Manufacturing of food, textile, lumber and wood, paper, chemicals, metal, stone, clay, glass, and concrete products, banks, service stations, parking lots, restaurants, day care center, car washes, truck and trailer sales and rental, recycling collection facilities
Manufacturing Medium	M-M	Wineries, manufacture of tires and tubes, fabrication of rubber, plastic, and synthetic products, medical instruments, supplies and equipment, photography equipment, animal training, natural gas, above ground storage
Controlled Development Areas	W-2	One family dwelling uses when the lot is less than 1 acre, Light Agriculture uses when the lot is greater than 1 acre, public utility uses
Source: City of Calimesa, 1993; Riverside Zoning Ordinance, 1989.		



## REDEVELOPMENT AREA

Prior to the incorporation of Calimesa, Riverside County designated a redevelopment project area extending between County Line Road, Fifth Street and its exit west of Interstate 10, Seventh Place, and Interstate 10, as shown in Exhibit 1-4. In general, the area is developed with older commercial and manufacturing uses between Interstate 10 and Calimesa Boulevard, with single family residences east and west of these areas. The economic value of many of the structures within the Redevelopment Project Area has declined steadily with age and from deferred property maintenance and upkeep.

Calimesa has recently experienced rapid population increases and a corresponding increase in the demand for commercial goods and public services. In particular, development forces have impacted the commercial backbone of the City, which extends between Interstate 10 and east to Fifth Street. Commercial services have not kept pace with the increase in population demand and time-limited investment has resulted in deteriorating commercial and residential structures, constricted access, inadequate parking, and a deficient infrastructure.

In 1986, the Riverside County Redevelopment Agency established a redevelopment plan area on approximately 172 acres in Calimesa to provide for the elimination of blight conditions by providing needed public improvements, mitigating the effects of faulty planning, and correcting problems of impaired investments and economic maladjustment. Authorized implementation measures of the Redevelopment Plan include: acquisition of property for the Agency, the construction of streets, utilities, open spaces, and other public improvements and facilities, and the rehabilitation, development, or construction of low and moderate income housing within the project area. The City of Calimesa is in the process of acquiring the Redevelopment Plan structure and its revenues from Riverside County.

## PUBLIC SERVICES AND INFRASTRUCTURE

### *Water Supply*

Water for the City of Calimesa is provided by the Yucaipa Valley Water District and the South Mesa Water Company. The Yucaipa Valley Water District (YVWD) serves the southern portion of Calimesa, generally south of Avenue L, and the South Mesa Water Company provides water to the northern portion of the City between Holmes Street on the east, Calimesa Boulevard on the west, Avenue L on the south, and Avenue F on the north. See Exhibit 1-5.

Water supply comes solely from YVWD and South Mesa deep wells, although individual private wells may be found on residential and agricultural lots larger than 1/2 acre. There are 4 wells and 2 reservoirs serving the YVWD and the South Mesa Water Company. Water mains are found throughout most of the developed areas of the City. The YVWD is planning water main upgrading/replacement projects along Buena Mesa Drive, Mesa Grande Drive, Calimesa Boulevard, Chandler Avenue, and Harruby Drive and replacement of the Slack Reservoir.

The potential for imported water from the State Water Project (SWP) has resulted in the formation of two areawide water agencies: the San Gorgonio Pass Water Agency and the San Bernardino Valley Municipal Water District (of which Yucaipa Valley Water District is a member). In the event imported water supplies from the State Water Project are secured, the San Bernardino Valley Municipal Water District has contracted to receive 102,600 acre-feet per year, and the San Gorgonio Pass Water Agency has contracted to receive 17,400 acre-feet per year.

The City's projected population growth over the next decade will represent a significant increase in the demand upon local and regional water supplies. The City adopted water conservation for landscaping (Ordinance 92-18) in December 1992 which includes requiring landscape and irrigation plans for new development, and proper soil drainage, limited irrigation operations hours, and promoting the use of recycled water.

### ***Sewer Service***

In addition to providing potable water for City residents, the Yucaipa Valley Water District also provides wastewater treatment service. The H.N. Wochholz Sewage Treatment Plant, located west of Interstate 10 near the County Line Road terminus, treats approximately 2.5 million gallons of wastewater per day (mgd) and was recently upgraded to expand its capacity to 4 million gallons per day (mgd). Wastewater is routed to the plant via Calimesa Boulevard and County Line Road (see Exhibit 1-6). Lift stations are used in lower elevations to facilitate gravity transport to the treatment plant.

The treatment plant employs advanced (tertiary) wastewater treatment plus denitrification filtration with effluent discharged into the San Timoteo Creek. Sludge is stored in a sealed tank, and some 5,000 to 10,000 pounds are collected weekly by Recyc, Inc. and transported to the Lambs Canyon Landfill or used as composting material. The treatment facility also includes a water reclamation plant and provides reclaimed water to private users in the area.

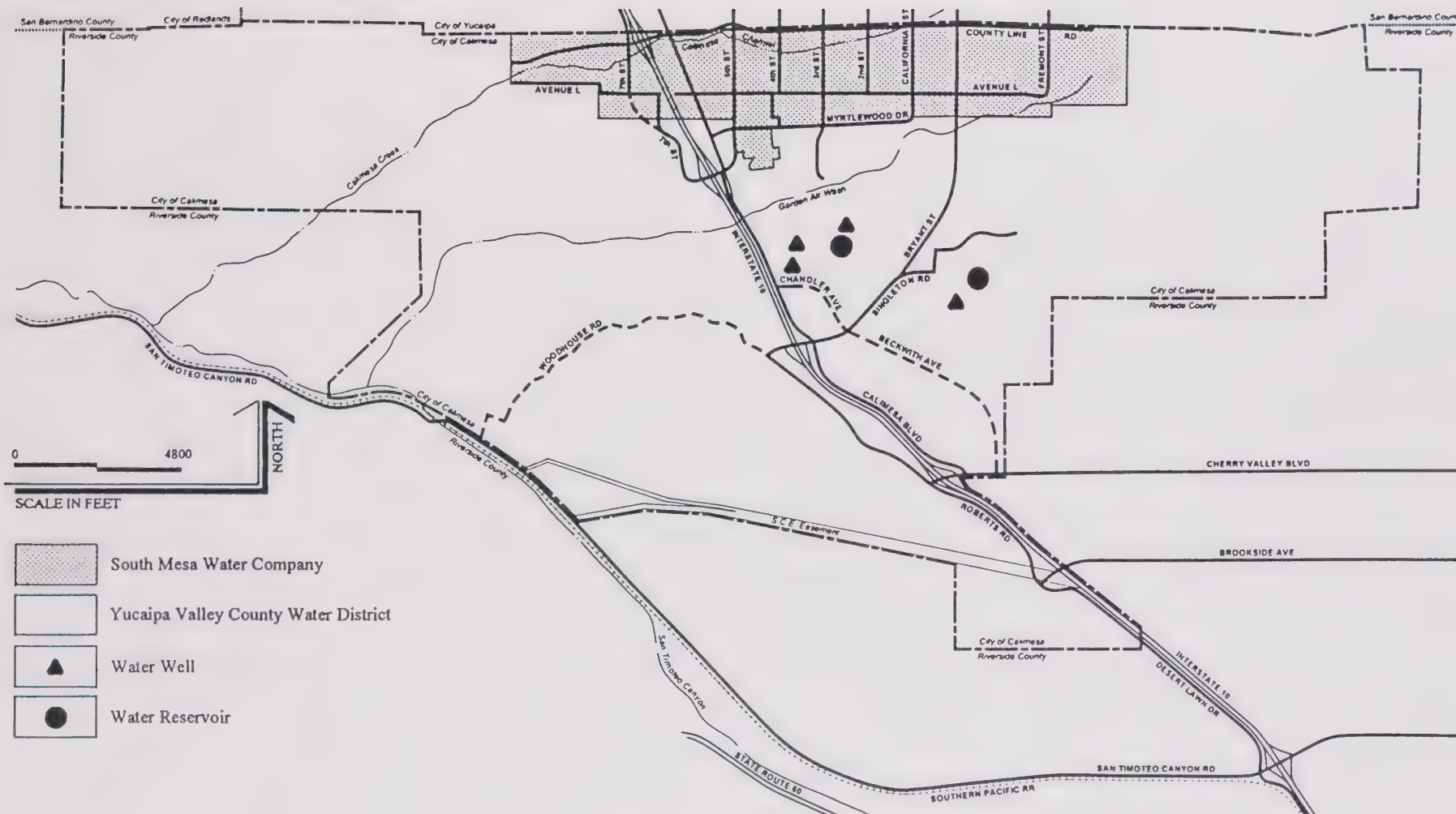
The Yucaipa Valley Water District did not identify any deficiencies in the existing wastewater system. However, the 1990 Sewer Master Plan Update indicated that, at buildout, lift stations, force mains, and interceptor lines could be over-capacity. The Yucaipa Valley Water District is expecting the demand for wastewater treatment to increase as new development project approvals require installation of sewer lines, and as the trend from septic tank systems to the sewer system continues.

The wastewater system collects residential, commercial, industrial and municipal sewage through sewer mains located throughout the City. In addition, the use of septic tanks continues for many lots that are 1/2 acre or larger and developments in outlying areas.

SOURCE: City of Calimesa

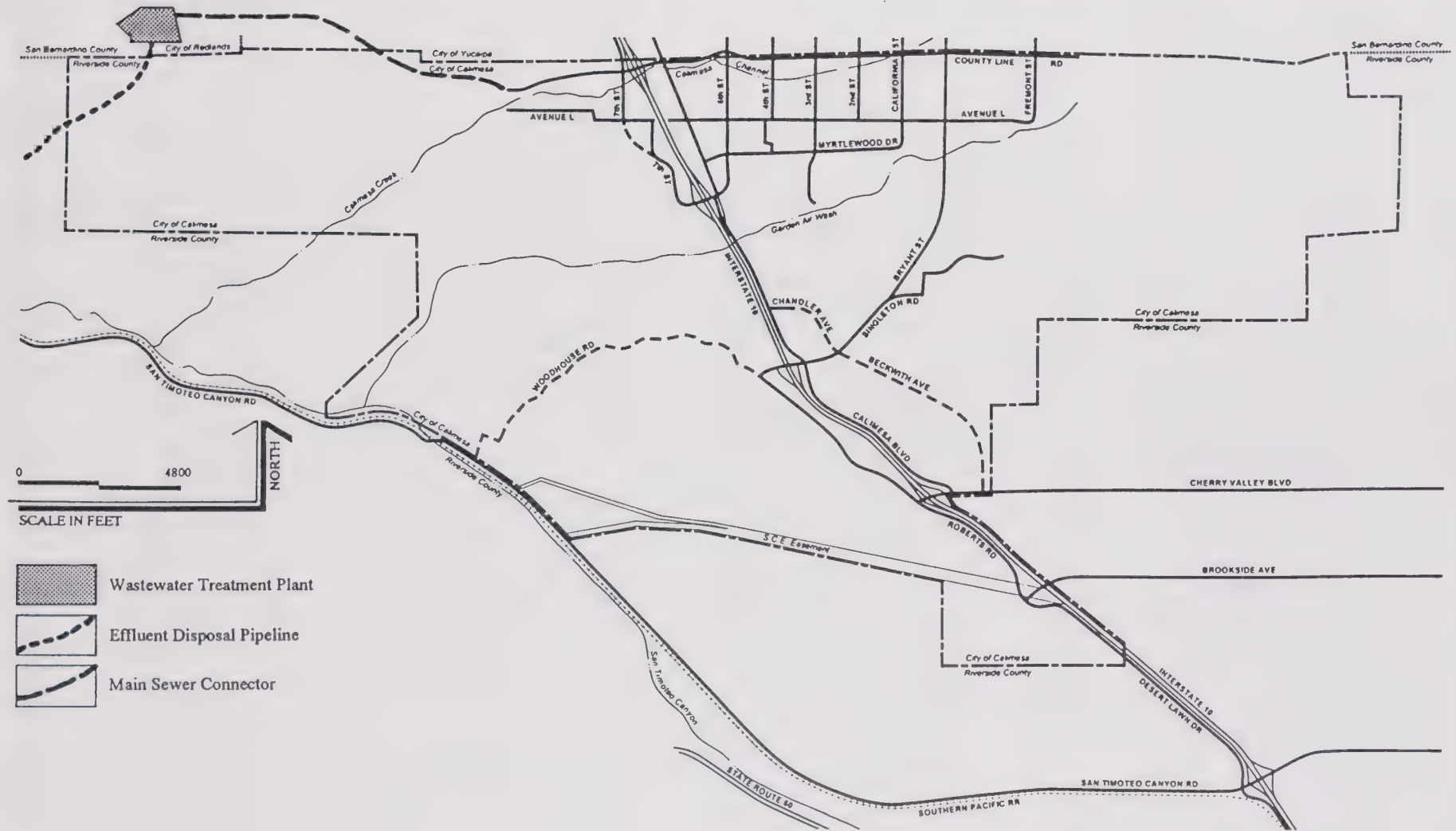














### ***Storm Drains***

Stormwater in the Calimesa area generally flows from the San Bernardino Mountains in the north and east to the San Timoteo Creek in the west. The Calimesa Flood Channel, which weaves between County Line Road and Avenue L West, is under the jurisdiction of the Riverside County Flood Control and Water Conservation District (RCFC & WCD). It serves as the main drainage channel for the northern section of the City. Calimesa has authority over other unimproved stream courses and storm drain facilities. These include: the Garden Air Wash which drains the central portion of the City and intermittent stream channels draining the San Bernardino Mountains and the Calimesa Hills (see Exhibit 1-7).

The City is currently in the second phase of a National Pollutant Discharge Effluent System (NPDES) water quality management program with the RCFC & WCD. This effort will help reduce pollutant discharges into the local storm drainage system.

Urban runoff and local storm flows are presently carried within the street right-of-ways. Storm drainage in Calimesa is mainly through natural and surface flows, identified inadequacies include drainage along Interstate 10, inlet capacities of culverts through the freeway, unimproved portions of Calimesa Creek and limited capacity of Calimesa Channel. These are discussed in the Safety Profile Report. Improvements to the City's drainage system are currently provided by new development, as developers are required to maintain storm flows onsite and provide underground storm drains as part of individual development projects. The City recently adopted a Master Flood Control and Drainage Plan to address flooding and storm water disposal in the area.

### ***Trash Service***

Calimesa maintains an exclusive contract with Cherry Valley Sanitation (CVS) Company for all municipal refuse pick-up and disposal. There are approximately 1,700 residential customers, served once a week, on Wednesdays, Thursdays, and Fridays. In addition, there are approximately 150 commercial (including mobile home and multiple dwelling residences), 10 industrial and 1 public customer served. Solid waste is disposed at the Lambs Canyon Landfill, 6 miles southeast of Calimesa. According to a solid waste generation analysis performed by Riverside County, an average of 182 tons of residential refuse, 178 tons of commercial refuse and 31 tons of industrial refuse was delivered to Lambs Canyon landfill each month in 1991. Lambs Canyon Landfill accepts an average of 451 tons of waste per day and has a remaining lifespan of 13 years. Hazardous materials are collected on a business-by-business basis, as arranged with private, licensed haulers.

The City of Calimesa has developed waste reduction programs to extend landfill capacity. Residential curbside recycling began in January 1992 and diverts an average of 40 tons of refuse per month for landfill disposal. Unsorted recyclables are hauled to the Palm Springs Recycling Center located in Cathedral City. Other recent efforts have included a City Clean-up Day for household hazardous waste, and a drop off center for recyclables at City Hall.



Development of Calimesa is expected to have a minimal adverse impact on solid waste generation. The City is currently preparing the State-required Source Reduction and Recycling Element. This element will contain a recycling and waste reduction program that will lead to a 25% reduction in solid waste by 1995 and a 50% reduction by 2000. It is anticipated that Calimesa will select several options designed to minimize wastestream growth to be implemented during the construction phase and by homeowners. In addition, the Calimesa Planning Department is expected to implement turf reduction requirements to reduce the amount of green waste.

Future trash collection service improvements will be based on compliance with the SRRE reduction requirements for 1995 and 2000. Cherry Valley Sanitation is expected to finance the service improvements, most likely through private capital investment.

### ***Natural Gas***

The Southern California Gas Company (SCG) is the regional natural gas purveyor and also services Calimesa. SCG maintains a network of underground natural gas lines serving residential, commercial and industrial customers throughout Calimesa, and has indicated that adequate natural gas supplies exist to serve expected population growth.

### ***Electrical Power***

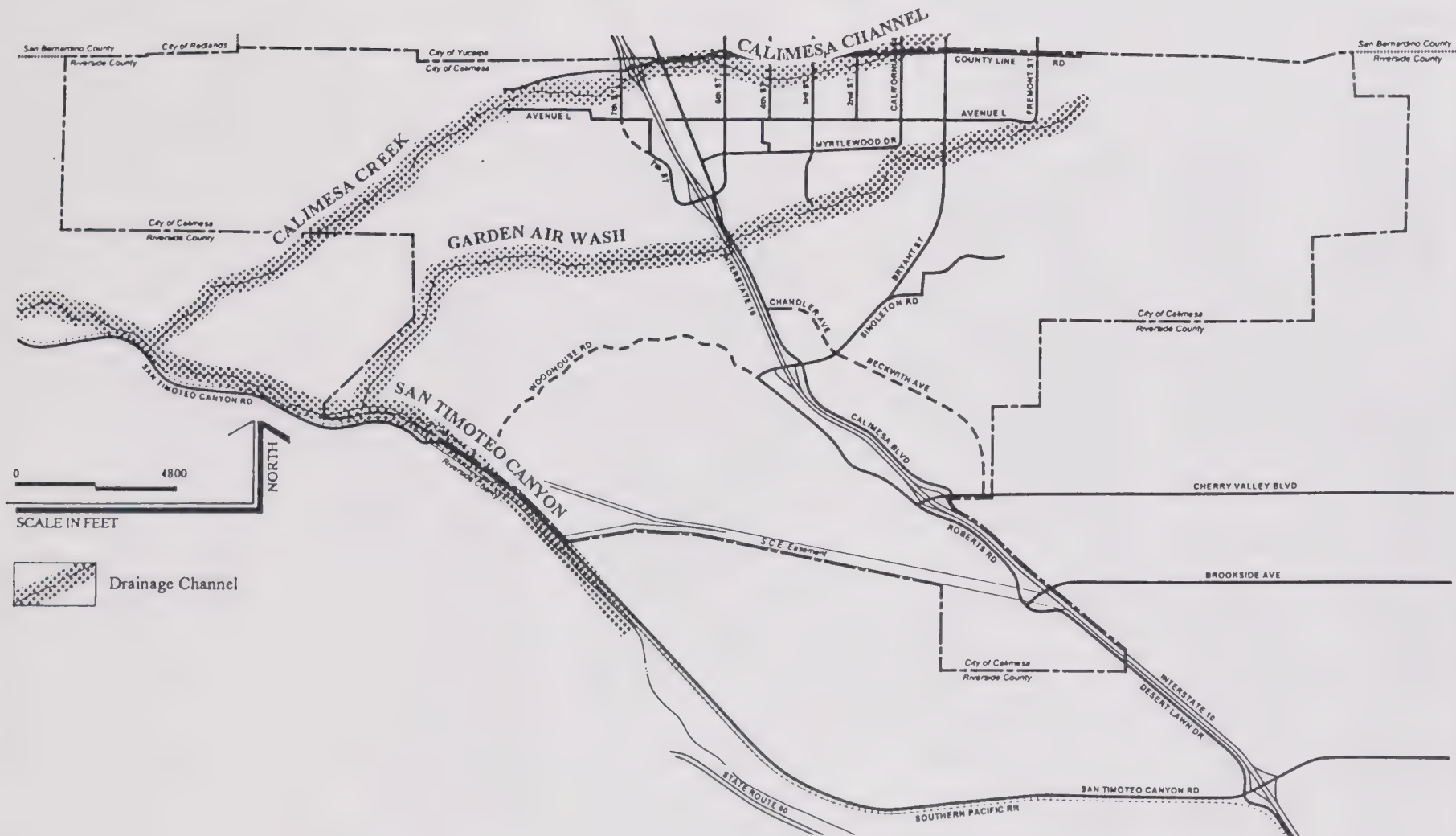
Electrical power service to the Southern California region, including Calimesa, is provided by Southern California Edison (SCE). SCE maintains an 86-acre electrical power easement along the City's southwest boundary, which is retained as passive open space and also supports nursery operations. SCE administers several energy conservation programs for their customers including financial incentives for residents and commercial customers, and conservation services to aid low-income residents, senior citizens, the handicapped, and non-English speaking customers.

### ***Communications***

General Telephone of California, Inc. provides local telephone service to Calimesa customers through above ground telephone cables. Several long distance telephone companies are available to residents and commercial customers. Cable television in the City is provided by Southland Cablevision.

### ***Law Enforcement***

The Banning Sheriff's Station provides law enforcement and police protection services, on a contract basis, to the City of Calimesa. Located 8.2 miles southeast of the City at 155 E. Hays Street in Banning, the station is staffed by 25 sworn and unsworn personnel and has 8 marked units, and 3 unmarked units. It maintains an approximate 6 minute response time for all calls. Calimesa contracts for 24-hour patrol coverage which includes preventive patrol, deputies taking reported criminal and non-criminal calls, and traffic collision reports. Other law enforcement services provided by the Banning Sheriff's Department include criminal investigation, laboratory services, crime prevention programs, school programs, search and rescue, non-criminal, public service







programs, and traffic enforcement. The County Sheriff maintains mutual aid agreements with the Beaumont Police Department, as well as with county and State agencies. The Banning Sheriff's Station is presently coordinating with the City of Calimesa on the implementation of a Citizens on Patrol Program.

Although the Riverside County Sheriff's Department law enforcement standard is one sworn officer per thousand population, the County functions at a service ratio of 0.85 sworn deputies per thousand population. In Calimesa, the existing law enforcement protection services operate at 0.79 sworn deputies per thousand population.

The Banning Sheriff's Station recommends that new development implement proper planning mechanisms to reduce congestion in neighborhoods that do not have adequate traffic flows; proper adherence to the building safety code, and the use of safety hardware such as deadbolts, window locks, alarms, and lighting. In addition, the Sheriff's Department anticipates the need to establish City ordinances designed to reduce overcrowding in specific areas and provide adequate traffic control devices. The nearest California Highway Patrol Station is at 60 N. Highland Springs Avenue in Banning.

### **Fire Protection**

The City of Calimesa contracts with the Riverside County Fire Department for fire protection services. Station 21, located at 906 Park Avenue adjacent to City Hall provides first response fire protection service to Calimesa. The immediate response area of this station extends from County Line Road to Cherry Valley Boulevard and the target response time is 5 to 6 minutes. The County Fire Department maintains mutual aid agreements with the Cherry Valley, Beaumont, and Yucaipa Fire Stations which would provide backup assistance to Calimesa in the event of a large fire or other emergency. Available staff, equipment, and distance to Calimesa are summarized in Table 1-3 below. Station locations are shown in Exhibit 1-8.

TABLE 1-3 FIRE STATION STAFF AND EQUIPMENT		
Station No. & Location	Staff & Equipment	Distance to Calimesa
Station 21 906 Park Avenue Calimesa	1 full-time employee 1 part-time employee 15 member volunteer force 2 engines	within City
Station 22 10055 Miravilla Cherry Valley	3 paid personnel 12 member volunteer force 1 rescue squad 2 engines	1.5 miles

**TABLE 1-3  
FIRE STATION STAFF AND EQUIPMENT**

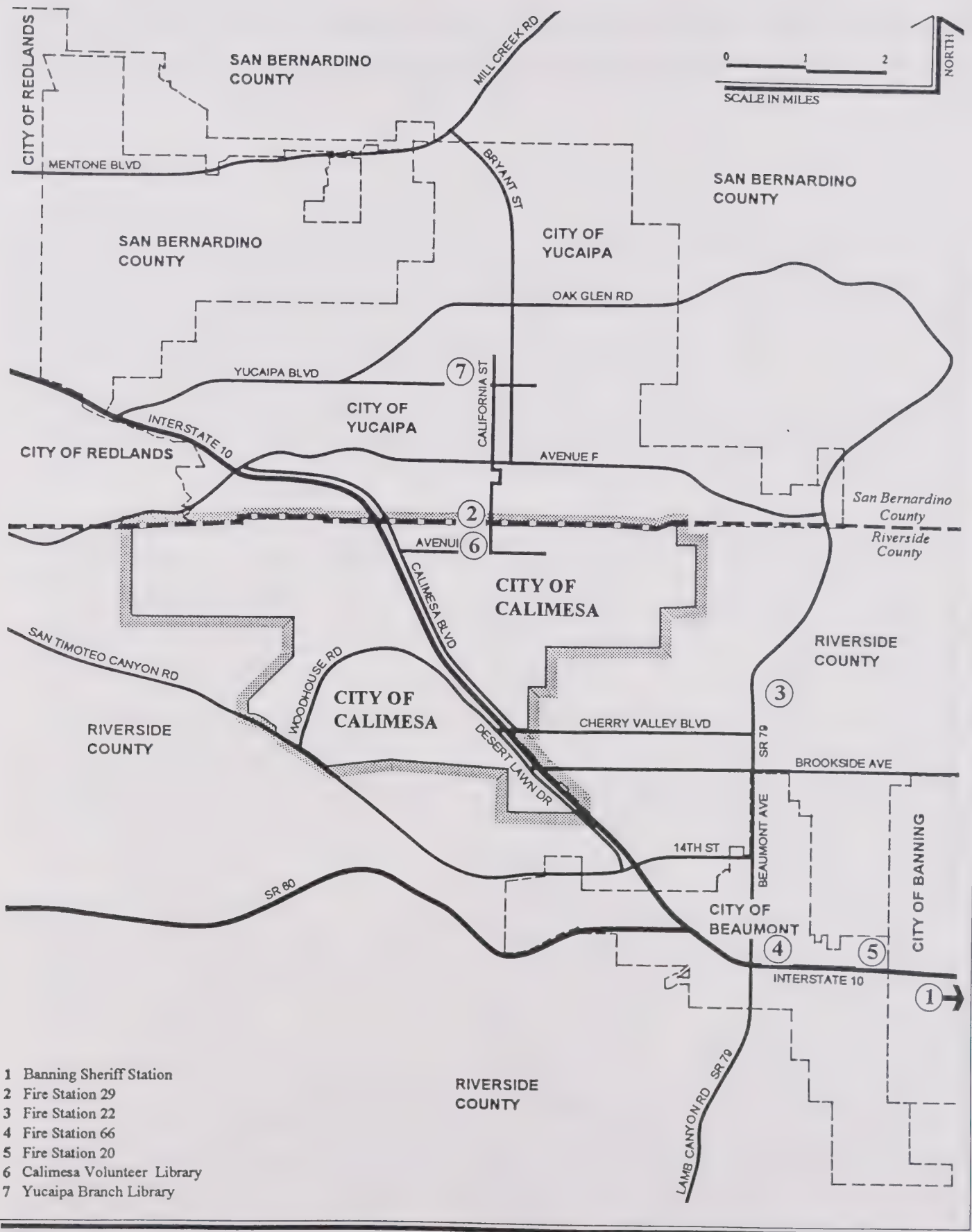
Station No. & Location	Staff & Equipment	Distance to Calimesa
Station 66 628 Maple Street Beaumont	1 full-time employee 1 part-time employee 25 member volunteer force 1 rescue unit 1 attach vehicle 1 water tanker	2.8 miles
Station 20 1550 E. 6th Street Beaumont (State Department of Forestry Facility responding to both wildland operations and urban fires)	4 full-time employees per engine during fire hazard season 1 full-time employee per engine during the winter months 10 member volunteer force 2 engines 1 bulldozer	4 miles
Source: Riverside County Fire Department, November 1992.		

### *Library Services*

The library system in Calimesa is operated by the Riverside County Free Library and the Public Library of the City of Riverside. The County Free Library supports 23 branch libraries and 3 bookmobiles through property tax assessment within unincorporated Riverside County areas and 15 cities participating in the Library District. Service standards in the Riverside County branch libraries are 1.2 volumes per capita and 0.5 square feet per capita. Based on Riverside City and County Public Library Annual Reports, the 1990 volume per capita was 0.97 and the 1991 volume per capita was 1.07. Although volumes per capita have increased in recent years, they have not kept pace with Riverside County service standards.

There are 119 cardholders in Calimesa registered to the Riverside City and County Public Library system. In addition to the Riverside County library system, the San Bernardino Public Library System operates a branch at 12040 5th Street in Yucaipa, which is also available to Calimesa residents. Library locations are shown in Exhibit 1-8.

Calimesa is a member of the Riverside City and County Public Library System and is served by a 220-square-foot volunteer library housed within the Norton Younglove Multipurpose Senior Center. This facility is located at 908 Park Avenue, adjacent to City Hall. This library has 356 volumes and a number of long term loans from other libraries in the system. The Calimesa Volunteer station is the smallest unit for service delivery within the library system, and serves an estimated population of 7,150. The current level of service is recognized as substantially inadequate for the Calimesa population. Estimated start-up costs for the City to provide adequate service to Calimesa residents is \$1,124,809 for obtaining additional facilities and collection volumes.







Additional library services in Calimesa are provided by Western Company Bookmobile which serves two locations in Calimesa on the first four Mondays of each month, and offers occasional story times.

### School Facilities

The Yucaipa-Calimesa Joint Unified School District serves the student population residing generally north of the Calimesa Golf and Country Club. The Beaumont Unified School District serves Calimesa residents south of the golf course. There are no public school facilities in Calimesa and therefore, Calimesa students must travel to either Yucaipa or Beaumont to receive public elementary, junior high, and high school education. Public schools serving Calimesa residents are listed in Table 1-4 below. Schools and school district boundaries are shown in Exhibit 1-9.

TABLE 1-4 PUBLIC SCHOOL FACILITIES			
Name of School	Location	Enrollment	Capacity
Yucaipa-Calimesa Joint Unified School District			
Calimesa Elementary School	13523 2nd St.	687	907
Park View Middle School	34875 Tahoe Dr.	1,210	1,518
Yucaipa Junior High School	12358 6th St.	1,578	1,336
Yucaipa High School	33000 Yucaipa Blvd.	1,877	1,710
Green Valley Continuation High School	35912 Ave. B	59	66
Beaumont Unified School District			
Wellwood School (K-1)	715 Wellwood Ave.	440	400
Palm School (Grades 2-3)	751 Palm Ave.	356	492
Summit School (Grades 4-6)	650 Magnolia Ave.	536	727
Chavez School (K-6, year round)	1300 Cherry Ave.	641	800
Mountain View Junior High School	1575 Cherry Ave.	527	446
Beaumont High School	1591 Cherry Ave.	836	941
San Andreas Continuation High School	939 E. 10th St.	80	70
Source: Yucaipa-Calimesa Joint Unified School District, Beaumont Unified School District, January 1993.			

In addition to public education opportunities, the Mesa Grande Seventh Day Adventist Academy, located at 975 Fremont Street provides private elementary and secondary school education to area

residents. There are no colleges or universities in Calimesa. Crafton Hills College is a two-year community college located 3 1/2 miles northwest of Calimesa in the City of Yucaipa.

### ***Adult Education Program***

In addition to public and elementary school programs and services, the Yucaipa-Calimesa Joint Unified School District has operated an adult education school since 1963. The Adult School and Office, located at 12787 Third Street in Yucaipa processes over 6,000 registrations each year for over 2,700 students. Adult education programs are held Monday through Saturday at the Adult School, 10 additional locations in Yucaipa, and at the Norton Younglove Multipurpose Senior Center in Calimesa. Current course offerings include General Education Development which includes the Learning Lab, English as a Second Language (ESL) and General Education Development (GED), Parent Education, Vocational Classes, Older Adult Programs, Health and Safety, Homemaking, and Community Service/Fee Classes. The Senior Center hosts a kiln fired glass art class, a creative writing class, a money management class, and a creative needle arts class.

The Learning Lab, ESL, and Parent Education program have experienced significant enrollment increases. Two of the Older Adult programs have been changed to handicapped programs in response to changing student needs. Future plans include a Community Education and Training Center (CETC). The program also offers educational, personal, and career counselling services.

## **DEVELOPMENT CONSTRAINTS**

### ***Earthquake Faults***

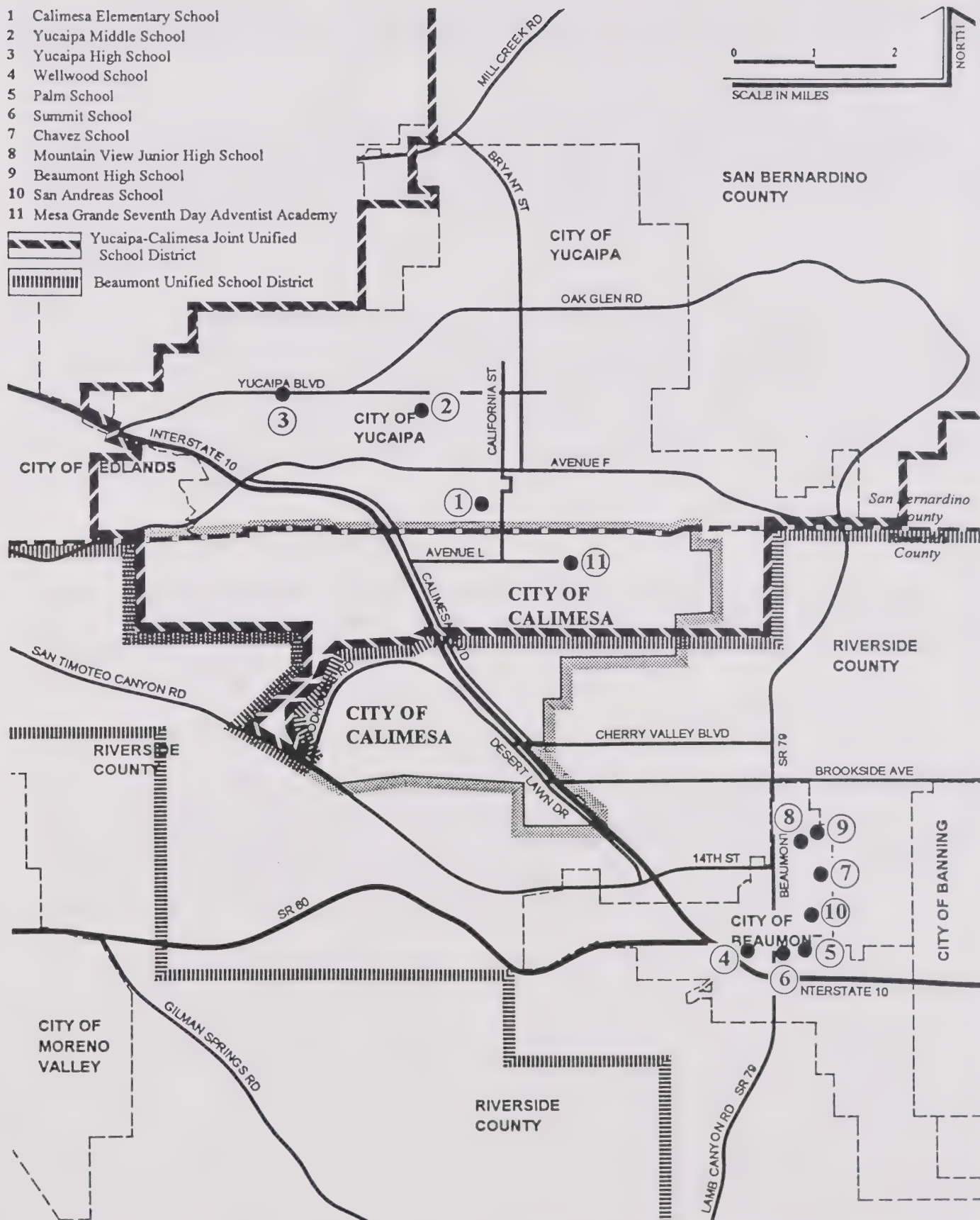
Calimesa is subject to seismic events from active and potentially active earthquake faults traversing the Southern California region. The San Andreas fault, situated 3 miles southwest of Calimesa is considered to be capable of producing a maximum credible earthquake of 8.0 on the Richter scale. Geologists estimate there is a 60% chance that a seismic event of this magnitude could occur over the next 30 years.

Other earthquake faults that could affect the City include the San Jacinto fault, the Elsinore fault, the Beaumont Plain fault, the Pinto Mountain fault, and the Crafton Hills fault. In addition, the Banning, Singleton Ranch, San Gorgonio Pass, and Cherry Valley faults transect Calimesa. These faults have not been seismically active in recent years and there have been no studies addressing the frequency of past seismic events.

### ***Terrain***

The north central portion of Calimesa is relatively flat and with slight to moderate modifications, soils can accommodate urban development. The Oak Hills area, occupying the eastern portion of the City, and the San Timoteo Canyon area located west of Interstate 10 consists of rolling terrain, and a series of canyons and ridges. Steep hillsides of these areas requires major soil modifications to accommodate development.







### ***Liquefaction***

Liquefaction is the loss of cohesion between soil particles due to shaking and the ground behaves like liquid. Canyons in the City consist of loose, unconsolidated deposits with groundwater within 30 feet of the surface. These soils present a high potential for liquefaction and are generally found on the northwestern, western, and southwestern portions of Calimesa.

### ***Landslides***

Calimesa is situated on the San Timoteo formation which consists of sandstones and claystone deposited by streams originating in the San Bernardino Mountains, older alluvium and younger alluvium. These sediments are poorly bedded and easily erodible, and thus susceptible to landsliding, debris and mudflows, settlement, and erosion. The older alluvial deposits exposed on steep faces of river bank cliffs are susceptible to surficial soil slips, debris flows, and mudflows. The Oak Hills area in eastern Calimesa and the San Timoteo Canyon area in western Calimesa is susceptible to erosion and landslides.

### ***Southern California Edison Easement***

Southern California Edison maintains a easement along the City's southwest boundary. The easement is retained as passive open space and supports some nursery operations. Unusually strong winds and seismic events, could cause disruption of the power lines, trigger electrical fires, and threaten human life and property.

### ***Biological and Cultural Resources***

The undeveloped portions of the City contain native plant and animal species and serve as habitat for a wide variety of wildlife species. Also, archaeological and paleontological resources have been found in the City, making adjacent areas sensitive or having high potential for similar resources. Development would be constrained by the presence of sensitive habitats and cultural resources, as federal, state and local regulations call for the preservation of these resources.





## SECTION 2: CIRCULATION

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### INTRODUCTION

This document summarizes the initial sections of the City of Calimesa Circulation Element technical report. According to State guidelines (State of California Government Code Section 65302(b)), General Plan Circulation Elements shall include "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other public utilities and facilities, all correlated with the land use element of the plan." The mandatory circulation element issues, or those which must be addressed within the General Plan, are as follows:

- Major thoroughfares
- Transportation routes
- Terminals
- Other local public utilities and facilities

Other specific items which are not mandatory but may be covered within General Plan Circulation elements include:

- Streets and highways
- Public transit routes, stops and terminals
- Bicycle and pedestrian routes and facilities
- Truck routes and restrictions
- Parking facilities
- Transportation system management and transportation demand management

Upon adoption, the City of Calimesa General Plan Circulation Element will cover all of the issues listed above. It will describe existing circulation conditions in the City, establish standards for planning improvements to the circulation system in coordination with planned growth in the City and it will provide a basis for measurement of circulation system performance in future years and for future updates of the General Plan Circulation Element.

One of the principal elements of any Circulation Element is the definition of the City's roadway system in terms of designated functions. For example, local residential streets are designed to serve only short distance local trips while arterial roadways are to serve longer distance trips and higher traffic volumes. The "functional classification system" defines each roadway in the City and provides guidelines for the level and type of traffic based on type of roadway. The proposed functional classification system is described in more detail below along with a summary of existing circulation system conditions.

## FUNCTIONAL CLASSIFICATION SYSTEM

The primary circulation system in the City of Calimesa consists of surface streets and arterial highways. These streets serve two distinct and equally important functions: Access to adjacent properties, and movement of persons and goods into and through the City, respectively. The design and operation of each street or arterial highway depends upon the importance placed on each of these functions. For example, the arterial highways are designed to carry large volumes of vehicles into and through the City so they have more lanes, higher speed limits and fewer driveways. In contrast, residential streets have fewer lanes, lower speed limits, and more driveways to provide access to fronting properties.

A classification system is used to identify the function of each roadway in the City. The system provides a logical framework for the design and operation of the roadway system. Because Calimesa is a newly incorporated city, the functional classification of the City's street system was previously established by the County of Riverside. One of the purposes of the first Circulation Element is to establish a functional classification system for the City to adopt for future circulation planning. The City may choose to adopt the existing County classification system or the system can be modified according to the desires of citizens and elected officials.

The functional classification system allows the residents and elected officials to identify preferred characteristics of each street. If observed characteristics of any street changes from the functional classification, then actions can be taken to return the street to its originally intended use or to change the designated classification in response to new developments. Each classification has a designated curb-to-curb width and right-of-way width. Therefore, right-of-way can be obtained under the guidance of the General Plan for those roadways which are not yet built to standard.

It is important to note that the functional designation of a roadway does not necessarily indicate the existing conditions (i.e. traffic volume, width and available right-of-way). Instead, it indicates the intended use and ultimate design of the roadway to accommodate anticipated travel demand.

The technical analysis associated with General Plan Circulation Elements includes many terms which are not commonly used and which may require explanation for the reader. For this reason, a glossary of terms is provided at the end of this document which explains many of the most often used technical terms in transportation planning and engineering.

### 2.1 RIVERSIDE COUNTY GENERAL PLAN ROADWAY CLASSIFICATIONS

The County of Riverside categorizes roadways into the following functional classifications:

- Urban Arterial Highway which provides for through traffic movement between and across urban areas, along with limited direct access to abutting land uses, subject to controls of ingress, egress, and curb use. The designated curb-to curb width for Urban Arterial Highways is 110 feet in a 134 foot right-of-way. This functional



classification provides for six through lanes and a raised median plus an 8 foot parking lane on each side of the roadway.

- Arterial Highway which also provides for through traffic movement between and across urban areas, along with direct access to abutting land uses. The designated curb-to curb width for Arterial Highways is 86 feet in a 110 foot right-of-way. This functional classification provides for four through lanes and a raised median plus an 8 foot parking lane on each side of the roadway.
- Major Highway which also provides for through traffic movement between and across urban areas, with a greater degree of direct access to abutting land uses relative to Urban Arterial Highways and Arterial Highways. The designated curb-to curb width for Major Highways is 76 feet in a 100 foot right-of-way. This functional classification provides for four through lanes and may or may not include a raised or painted median.
- Secondary Highway which provides for traffic movement across the City as well as shorter distance local intra-city traffic movement. Secondary highways generally include greater access to abutting land uses than major or arterial highways and carry lower traffic volumes. Secondary arterials are designated to have a curb-to-curb width of 64 feet in an 88 foot right-of-way.
- Collector Highway which provides for traffic movements between local residential streets and the arterial highway system. Collector highways are not intended to carry long distance through trips but are instead designed solely to collect traffic from residential streets and channel it to the arterial highway system. Collector Highways are designated with 44 foot curb-to-curb widths and 66 foot rights-of-way.
- Local Residential Street which are subordinate of the basic circulation network described above, yet they constitute the majority of developed roads in most cities, including Calimesa. These streets are primarily intended to act as access to private property, and only serve the function of circulation within a neighborhood block. All dedicated residential streets, except for specially proclaimed "rural streets", are designed to have sidewalks and curbs constructed within a right-of-way of 40 to 60 feet. Residential streets under private ownership may have a variance from normal design standards of the City. Whether under public or private ownership, all residential streets should be designed and clearly identified by name and number to facilitate access by emergency and maintenance vehicles. All roads not designated into one of the categories listed above (except freeways) are considered local residential streets.

It is important to note that additional right-of-way may be required for any of these classifications wherever an arterial highway coincides with an adopted route for an additional public facility (e.g., bikeways or riding and hiking trails), or for a scenic highway.

Exhibit 2-1 illustrates the existing roadway network for the City of Calimesa. The functional designation of key roadways in the City are summarized below:

### **Urban Arterial Highways**

- Currently there are no roadways in Calimesa designated as Urban Arterial Highways.

### **Arterial Highways**

- San Timoteo Canyon Road
- Singleton Road from Woodhouse Road to approximately one-half mile south of Avenue L

### **Major Highways**

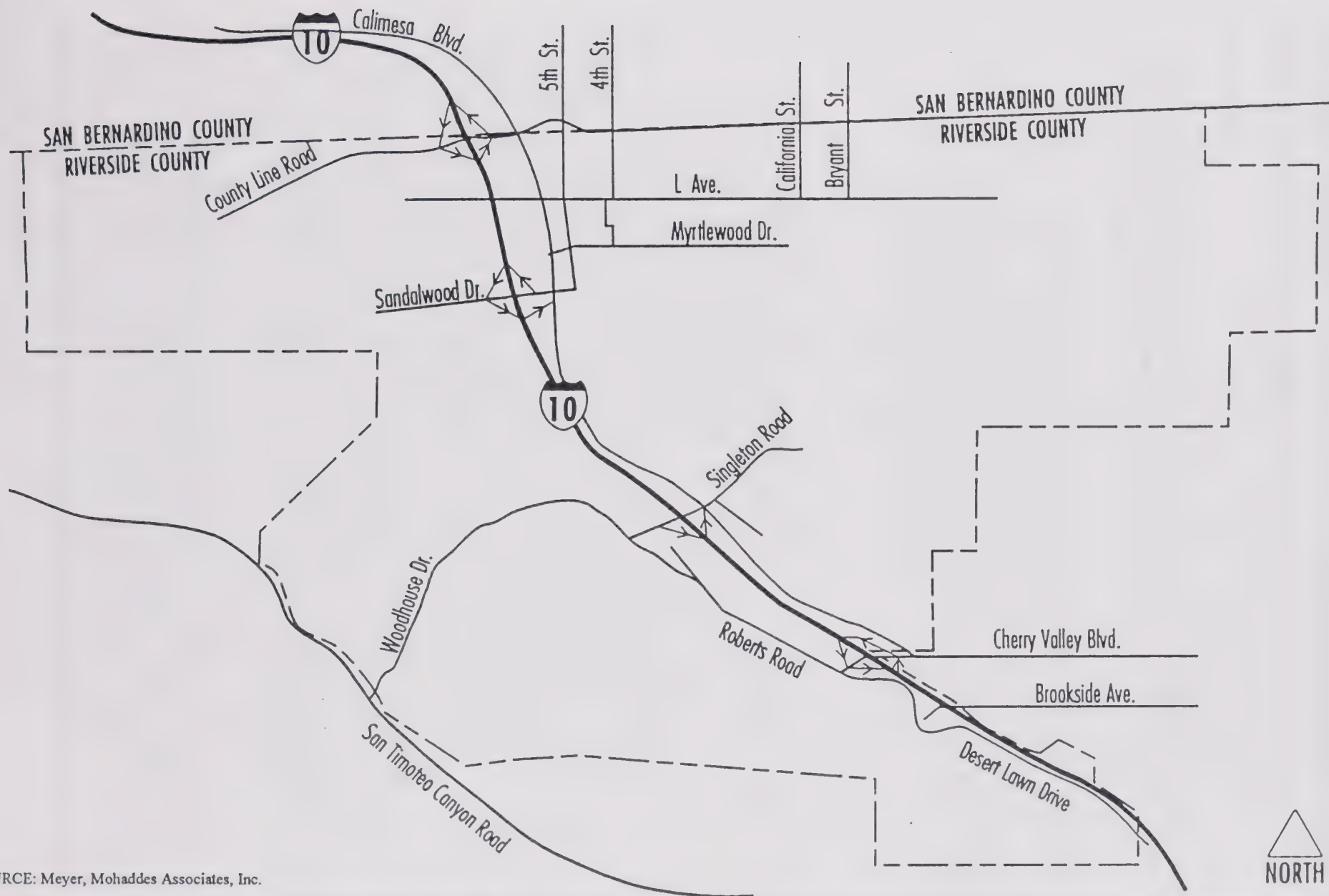
- Calimesa Boulevard from Singleton Road to Cherry Valley Road

### **Secondary Highways**

- Woodhouse Road
- Desert Lawn Road
- Brookside Avenue
- Avenue L
- 5th Street
- 7th Street from County Line Road to Avenue L
- County Line Road
- Bryant Street from approximately one-half mile south of Avenue L to County Line Road
- Holmes Street

### **Collector Highways**

- Currently there are no roadways in Calimesa designated as Collector Highways.



SOURCE: Meyer, Mohaddes Associates, Inc.





## ROADWAY GEOMETRIC CONDITIONS

### REGIONAL

The only freeway which passes through the City is Interstate 10 (I-10), although the Moreno Freeway (SR-60) intersects I-10 approximately 2 miles south of the City. A description of I-10 within the City is provided below.

**Interstate 10** - I-10 runs diagonally within the City of Calimesa. Outside of Calimesa, the freeway runs east-west, although within the City it is actually more north-south oriented. The annual Average Daily Traffic volume (ADT) for I-10 within the City ranges from 51,000 to 53,000 vehicles per day. Full "diamond" interchanges (interchanges which provide on- and off-ramps in both directions) are provided at County Line Road, Sandalwood Drive and Cherry Valley Road. A northbound (westbound) off-ramp and a southbound (eastbound) on-ramp are provided at Singleton Road. The freeway currently has three lanes in each direction within the City.

### LOCAL

The following paragraphs describe the general physical characteristics of roadways within the City and, where data is available, also describe traffic volumes. The physical descriptions are based on Meyer, Mohaddes Associates' field review of each facility.

**Calimesa Boulevard** - Calimesa Boulevard is a north-south roadway and is classified as a Major Highway as per the Riverside County General Plan. It has two lanes in each direction north of Sandalwood Drive and one lane in each direction south of it. The average daily traffic (ADT) volume ranges from approximately 5,400 to 7,300 vehicles per day (VPD) north of Sandalwood Drive and it ranges from 1,000 to 2,300 vehicles per day south of Sandalwood Drive. Parking is generally permitted north of Sandalwood Drive on either side of roadway and parking is not permitted south of Sandalwood Drive. The posted speed limit to the south of Sandalwood Drive is 25 miles per hour (mph). The adjacent land use is generally commercial between Sandalwood Drive and County Line Road and is residential to the south of Sandalwood Drive.

**County Line Road** - County Line Road is an east-west roadway and is classified as a Secondary Highway. It generally has one lane in each direction, except near Calimesa Boulevard. There is no curb or paved shoulder adjacent to the travel lanes for most of the roadway. The land use along this road is commercial near the intersection with Calimesa Boulevard at Third and Fourth Streets, and residential elsewhere. It carries an ADT of approximately 10,400 vehicles per day near Calimesa Boulevard.

**Cherry Valley Boulevard** - Cherry Valley Boulevard is an east-west roadway and is classified as a Specific Plan Road at the present time. Except near its interchange with I-10, the roadway lies outside the City of Calimesa. It has one lane in each direction with paved shoulders on each side for emergency parking. It carries an ADT ranging from 2,000 to 3,000. The posted speed limit is

55 mph. The adjacent land use is primarily vacant land along Cherry Valley Boulevard near the City limits.

**Brookside Avenue** - Brookside Avenue is an east-west roadway and is classified as a Secondary Highway. It has one lane in each direction and is generally rural in character, except near the intersection with Desert Lawn Drive which is the only portion of the road within Calimesa. There is no curb or provision for parking adjacent to the roadway. It carries an ADT of under 1,000. The adjacent land use is residential near the intersection with Desert Lawn Drive and is vacant land elsewhere.

**Sandalwood Drive** - Sandalwood Drive is an east-west roadway within the City. It carries one lane in each direction. In general, there is curb or paved shoulder adjacent to the travel lanes. The adjacent land use is primarily residential. It carries an ADT of approximately 2,200 vehicles per day near Calimesa Boulevard.

**Singleton Road** - Singleton Road is an east-west roadway to the west of I-10 and travels in a southwest-northeast direction east of the freeway. It is classified as an Arterial Highway and has one lane in each direction. Presently it extends from Woodhouse Road on the west of I-10 to approximately half a mile east of Calimesa Boulevard. It carries an ADT of approximately 1,300 vehicles per day east of Calimesa Boulevard. The adjacent land use is primarily residential.

**Roberts Road** - Roberts Road is a north-south roadway within the City. It extends from Woodhouse Road on the north to Cherry Valley Boulevard and continues as Desert Lawn Drive south of Cherry Valley Boulevard. It has one lane in each direction and generally there is no curb or paved shoulder along the roadway. The posted speed limit is 40 mph. The land along this road is primarily vacant. The ADT on Roberts Road near Cherry Valley Boulevard is approximately 150 vehicles per day.

**Desert Lawn Drive** - Desert Lawn Drive is a north-south roadway and is classified as a Secondary Highway. Desert Lawn Drive is an extension of Roberts Road from south of Cherry Valley Boulevard. It has one lane in each direction and there is no curb or paved shoulder adjacent to the roadway (except near the residential development on the west side of Desert Lawn Drive). The posted speed limit is 40 mph. The adjacent land use is primarily vacant land with pockets of residential development and a mortuary. It carries an ADT of approximately 850 vehicles per day near Brookside Avenue.

**Woodhouse Road** - Woodhouse Road is an east-west roadway and is classified as a Secondary Highway. It is proposed to extend between San Timoteo Canyon Road on the west to Singleton Road on the east. It is a part of the Oak Valley Specific Plan area and presently is not a through street. The adjacent land use is primarily vacant land.

**San Timoteo Canyon Road/14th Street** - San Timoteo Canyon Road extends in a northwest-southeast direction near the City of Calimesa border. It borders the Oak Valley Specific Plan area for the most part and it continues as 14th Street to the east of I-10. It is classified as an Arterial



Highway and has one lane in each direction. The posted speed limit for this roadway is 55 mph. There is no curb or paved shoulder along the roadway. It carries an ADT ranging from 600 to 4,400 vehicles per day. The adjacent land is primarily vacant with some nursery uses.

**Avenue L** - Avenue L is an east-west roadway and is classified as a Secondary Highway. It has one lane in each direction and has occasional curb and paved shoulder along the roadway. It carries an ADT of approximately 4,600 vehicles per day near Calimesa Boulevard. The posted speed limit is 35 mph. The adjacent land use is primarily residential.

**Fifth Street** - Fifth Street is a north-south roadway and is classified as a Secondary Highway. It has one lane in each direction and has occasional curb and paved shoulder along the roadway. It carries an ADT of approximately 1,800 vehicles per day south of Avenue L. The posted speed limit is 35 mph. The adjacent land use is primarily residential.

**California Street** - California Street is a north-south roadway within the City. It has one lane in each direction and has occasional curb and paved shoulder along the roadway. South of County Line Road, in the southbound direction, there is a residential frontage road. The posted speed limit is 25 mph. The adjacent land use is primarily residential. It carries an ADT of approximately 2,400 vehicles per day.

**Bryant Street** - Bryant Street is a north-south roadway within the City. It has one lane in each direction and has occasional curb and paved shoulder along the roadway. It carries an ADT of approximately 700 vehicles per day. The adjacent land use is primarily residential.

## INTERSECTION OPERATING CONDITIONS

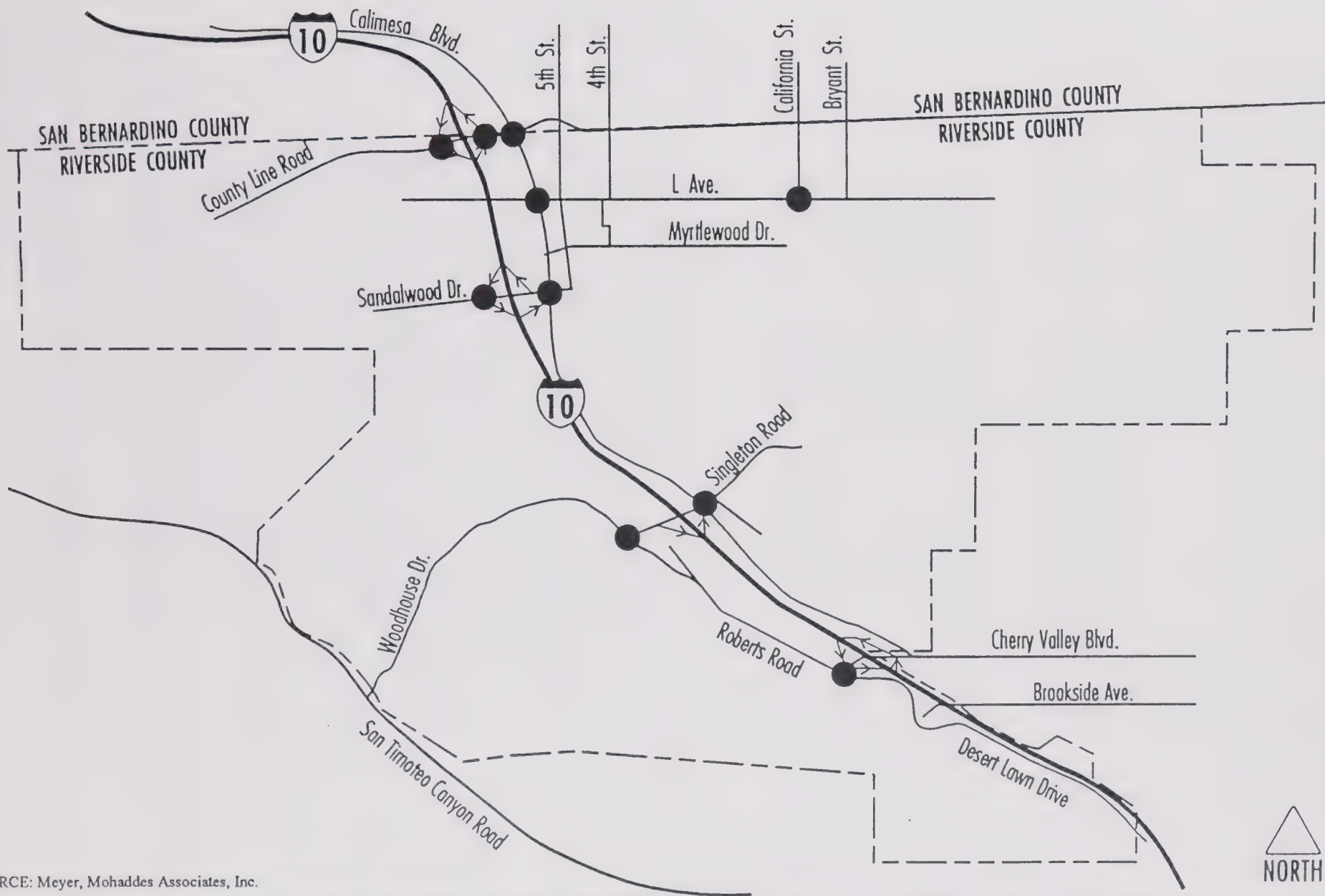
A total of 15 key intersections will be analyzed as part of the Circulation Element. Intersections often represent the greatest constraint on transportation system capacity since right-of-way must be alternately assigned to each cross street, thereby reducing the amount of time available for traffic to flow on the other cross street. Specialized techniques have been developed for the purposes of analyzing the quality of traffic operations at both signalized and unsignalized intersections. The results of the analyses are described in terms of "level of service" (LOS) at each location. Level of service is a description of intersection operating conditions on an "A" to "F" scale, with A representing excellent, free-flow traffic conditions and F representing severely congested conditions.

One of the most important types of data needed to conduct intersection analysis is peak period (i.e., 7 to 9 AM and 4 to 6 PM) traffic volume counts. Such counts are currently ongoing in Calimesa. The General Plan Circulation Element intersection analysis will be completed as soon as the count data is available. A total of ten existing intersections have been identified for analysis (see Exhibit 2-2). The remaining five locations are not currently constructed and are internal to proposed developments (i.e., Oak Valley or other) and will be analyzed because of anticipated significance in future traffic circulation. Table 2-1 illustrates the study intersection locations for existing conditions.

The 15 study intersections and the functional classification of existing roadways at each intersection are listed below:

TABLE 2-1 STUDY INTERSECTIONS			
Int. #	Intersection Name	Type of Control	Functional Classification*
1	Calimesa Boulevard/County Line Road	Signalized	Major/Secondary
2	County Line Road/ I-10 EB Ramps	Unsignalized	N/A
3	County Line Road/I-10 WB Ramps	Unsignalized	N/A
4	Calimesa Boulevard/Avenue L	Unsignalized	Major/Secondary
5	Avenue L/California Street	Unsignalized	Secondary/---
6	Sandalwood Drive/I-10 EB Ramps	Unsignalized	N/A
7	Calimesa Boulevard/Sandalwood Drive	Unsignalized	Major/---
8	Cherry Valley Blvd./I-10 to EB Ramps	Unsignalized	N/A
9	Calimesa Boulevard/Singleton Road	Unsignalized	Major/Arterial
10	Roberts Road/Cherry Valley Boulevard	Unsignalized	---/Specific Plan
11	Future Intersection	---	To be determined
12	Future Intersection	---	To be determined
13	Future Intersection	---	To be determined
14	Future Intersection	---	To be determined
15	Future Intersection	---	To be determined
*To be completed following receipt of data requested from County of Riverside.			
Source: Meyer, Mohaddes Associates, 1993.			

Currently, the intersection of Calimesa Boulevard/County Line Road is signalized and all other intersections are unsignalized (two-way or four-way stop sign controlled). As the City grows and traffic volumes increase there will be a need to install more traffic signals. The function of a traffic signal at the intersection of two streets is to assign right-of-way to the traffic on each of the intersecting streets. The capacity of each street is reduced at a signal because traffic on that street may be delayed while traffic on the intersecting street is allowed to flow. Therefore, signalized intersections are generally the most critical element affecting a roadway system's capacity. For the analysis of existing conditions, the ten study intersections will be analyzed for level of service using TRAFFIX software. TRAFFIX is a microcomputer model for traffic impact analysis developed by Dowling Associates. TRAFFIX can be used for a variety of tasks, such as to rapidly forecast the



SOURCE: Meyer, Mohaddes Associates, Inc.

**DEA** DAVID EVANS AND ASSOCIATES, INC.  
PROFILE REPORT

EXHIBIT 2-2  
STUDY INTERSECTIONS





traffic impacts of new developments and to calculate level of service at critical intersections (signalized and unsignalized). It has the ability to perform level of service analysis at intersections using a variety of methodologies, including HCM '85 and ICU.

## SIGNALIZED INTERSECTIONS

Operating conditions at the intersection of Calimesa Boulevard/County Line Road will be analyzed for the AM and PM peak hours using the Intersection Capacity Utilization (ICU) methodology. Based upon the new 1993 traffic counts, each study intersection will be analyzed for AM and PM peak hour volume/capacity ratios (V/C) and levels of service (LOS).

As mentioned above, the level of service concept is a fairly straightforward measure of average operating conditions at intersections during an hour. Table 2-2 explains in detail the service levels ranging from A to F with each level defined by a range of volume/capacity ratios. Level of service D is typically the lowest acceptable LOS in an urban area.

**TABLE 2-2  
LEVEL OF SERVICE**

Level of Service	Description	Volume to Capacity Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0-.59
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	.60-.69
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and backup-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	.70-.79
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues. <u>This level is typically associated with design practice for peak periods.</u>	.80-.89
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	.90-1.00
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.00
Source: <i>Highway Capacity Manual</i> , Special Report 209, Transportation Research Board, Washington, D.C., 1985 and <i>Interim Materials on Highway Capacity</i> , NCHRP Circular 212, 1982.		

## UNSIGNALIZED INTERSECTIONS

Analysis of unsignalized intersections is conducted differently from signalized intersections due to different operating characteristics. At signalized locations, all approaches to the intersection are subject to delay by a red signal indication. At a majority of unsignalized locations, however, only the minor street traffic and left-turning traffic from the major street are subject to delay. The major street through movement is never forced to stop to accommodate other traffic (unless there is a four-way stop). At unsignalized intersections the level of service is therefore calculated for the minor street traffic movements and the major street left turns only. Major street through traffic is not constrained and measurement of level of service is not possible, except for intersections with an all-way stop.

The vehicles on the side street and turning left from the major street at such an intersection must wait for gaps in major street through-traffic before proceeding through the intersection. The critical gap (length of time) that is acceptable to that traffic is a function of the number of through lanes on the major street and the prevailing speed of through traffic on the major street. Certain other physical characteristics of the intersections, such as lane-curb radii or the presence of acceleration lanes, can reduce the critical gap necessary to perform certain maneuvers. Conversely, other characteristics such as unfavorable vertical or horizontal alignment of the major street can increase the required critical gap. All of these factors are considered in the 1985 HCM unsignalized intersection analysis methodology used in this study.

The end measure of LOS at an unsignalized intersection, the reserve capacity, is the difference between the potential capacity and the actual or estimated traffic volume. For purposes of this analysis, a significant impact at unsignalized intersections is defined as a change in level of service on any traffic movement to LOS E or F from LOS D or better.

## LEVEL OF SERVICE

The only existing signalized intersection (Calimesa Boulevard/County Line Road) is operating at a level of service of A during both AM and PM peak hours. Table 2-3 and 2-4 illustrate the existing conditions level of service at unsignalized intersections. As illustrated in Table 2-3, during the AM peak hour, all unsignalized intersections are operating at Level of Service A or B. From Table 2-4, during the PM peak hour, only the intersection of County Line Road/I-10 EB Ramps is operating at a level of service F and all other unsignalized intersections are operating at a level of service A or B. The heavy southbound left-turns are contributing to the level of service F at the intersection of County Line Road/I-10 EB Ramps.



**TABLE 2-3**  
**AM PEAK HOUR UNSIGNALIZED INTERSECTION OPERATING CONDITIONS**

Intersection Name	Direction	Movement	Reserve Capacity <sup>(1)</sup>	LOS
County Line Road/I-10 EB Ramps	Westbound	Left-turn	898	A
	Southbound	Shared	473	A
County Line Road/I-10 WB Ramps	Eastbound	Left-turn	566	A
	Northbound	Shared	743	A
Calimesa Boulevard/Avenue L	All-way Stop	All	N/A	A
Avenue L/California Street	All-way Stop	All	N/A	A A
Sandalwood Drive/I-10 EB Ramps	Westbound	Left-turn	802	A
	Southbound	Shared	571	A
Calimesa Boulevard/Sandalwood Drive	All-way Stop	All	N/A	B
Cherry Valley Blvd./I-10 EB Ramps	Westbound	Left-turn	985	A
	Southbound	Shared	767	A
Calimesa Boulevard/Singleton Road	All-way Stop	All	N/A	A
Roberts Road/Cherry Valley Boulevard	All-way Stop	All	N/A	A

<sup>(1)</sup> Reserve Capacity Analysis based on 1985 *Highway Capacity Manual*.

**TABLE 2-4**  
**PM PEAK HOUR UNSIGNALIZED INTERSECTION OPERATING CONDITIONS**

Intersection Name	Direction	Movement	Reserve Capacity <sup>(1)</sup>	LOS
County Line Road/I-10 EB Ramps	Westbound	Left-turn	867	A
	Southbound	Shared	-34	F
County Line Road/I-10 WB Ramps	Eastbound	Left-turn	791	A
	Northbound	Shared	366	B
Calimesa Boulevard/Avenue L	All-way Stop	All	N/A	B
Avenue L/California Street	All-way Stop	All	N/A	A

**TABLE 2-4**  
**PM PEAK HOUR UNSIGNALIZED INTERSECTION OPERATING CONDITIONS**

Intersection Name	Direction	Movement	Reserve Capacity <sup>(1)</sup>	LOS
Sandalwood Drive/I-10 EB Ramps	Westbound	Left-turn	879	A
	Southbound	Shared	470	A
Calimesa Boulevard/Sandalwood Drive	All-way Stop	All	N/A	B
Cherry Valley Blvd./I-10 to EB ramps	Westbound	Left-turn	988	A
	Southbound	Shared	589	A
Calimesa Boulevard/Singleton Road	All-way Stop	All	N/A	A
Roberts Road/Cherry Valley Boulevard	All-way Stop	All	N/A	A
<sup>(1)</sup> Reserve Capacity Analysis based on 1985 <i>Highway Capacity Manual</i> .				

## TRANSIT SERVICES

Currently, there is no regularly scheduled public transit service available in the City of Calimesa. The Yucaipa Dial-a-Ride provides transit service for the elderly and handicapped persons in the area.

## AIRPORTS

The closest regional airport to Calimesa is Ontario International Airport in San Bernardino County. The closest municipal airport (general aviation) is the Banning Airport, which is located approximately 13 miles from Calimesa. There currently are no airport facilities in the City.

## RAIL FACILITIES

The Southern Pacific Transportation Company operates a rail line which passes directly adjacent to the Calimesa City boundary. The line provides freight rail service, however, there is no rail station or stop in the City.

## GLOSSARY OF TRANSPORTATION TERMS

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The language of transportation planning in the context of this General Plan Circulation Element includes a number of terms that are not commonly used or understood. The following section defines some of these terms for the user of this document.

**Auto Occupancy** is the number of people occupying an automobile, including the driver and all passengers.

**Average Daily Traffic (ADT)** is the total volume of traffic that travels over a fixed point on a road in a twenty-four hour period. This is a commonly used measure of traffic volume.

**Average Vehicle Ridership (AVR)** is a ratio of the number of person trips divided by the number of vehicles used to make those trips during the peak periods. An AVR of 1.5 indicates that, on average, one out of every two vehicles is carrying two passengers. Increasing AVR is a means of accommodating travel demand while at the same time decreasing the number of vehicle trips made.

**Capacity** refers to the maximum number of vehicles that can pass over a given section of roadway during a given time period under prevailing roadway and traffic conditions. Capacity is usually expressed in vehicles per lane per hour and is a function of street width, configuration, signals and potential conflict points.

**Demand-Responsive Transit** is a transit service which provides door-to-door or point-to-point transportation at the user's request. Dial-a-Ride and Airport Shuttle services are examples of Demand-Responsive Transit.

**Fixed Route Transit** is a transit service operating over the same street or highway pattern on a predetermined schedule. The Torrance Transit operates a fixed route bus transit system.

**Goal** is the ultimate purpose of an effort stated in a way that is general in nature and immeasurable; a broad statement of intended direction and purpose.

**Headway** is the time between arrivals of a bus or train at a specific location and in the same direction.

**High Occupancy Vehicle (HOV)** is a vehicle carrying two or more persons, including the driver, either in a carpool, vanpool, bus or other multiple passenger vehicle.

**High Occupancy Vehicle (HOV) Lane** is a freeway or arterial street lane that is reserved for use by buses, vanpools, and carpools; often referred to as commuter or carpool lanes.

**Implementation Policy** is a specific statement guiding action and implying a clear commitment.



**Level of Service (LOS)** is an indication of the performance of a roadway or intersection based on an evaluation of driving conditions, with six performance ratings as follows:

- A - Free Flow, very small or no delays at traffic signals
- B - Stable Flow, little delay
- C - Restricted flow, moderate delays
- D - Approaching unstable flow, substantial delays
- E - Capacity Conditions, Long delays
- F - Forced Flow, unacceptable delays

The **mode of travel** is that type of transportation used by people to get to where they want to go. A mode of travel can be auto, bus, bicycle, walking, rail or airplane.

**Neighborhood Management Program** is a cooperative program involving the City and residents which seeks to improve neighborhood environments by mitigating the impact of vehicular traffic on residential neighborhoods. Neighborhood programs generally encourage citizen participation and help staff to make efficient use of City resources by prioritizing traffic management requests. Traffic control devices (signs, signals and markings) as well as traffic management devices (curbs, medians, dividers, etc.) may be used by the City to address problems identified as part of the program.

**Neighborhood Traffic Controls** are measures designed to reduce or prohibit traffic intrusions into residential neighborhoods and encourage traffic to remain on major streets. Measures include but are not limited to the following:

- improving traffic flow on major streets by expanding street capacity through parking prohibitions or physical widening, signal synchronization, or reducing cross traffic interference;
- diverters or medians that restrict or prevent access to certain neighborhood streets;
- pavement treatment that reduces traffic speed;
- narrowing intersection or street width to visually or physically discourage through traffic from entering local neighborhood streets.

**Objective** is a measurable goal; a statement of desirable accomplishment within a specific time frame that is definite enough to know when and if it has been achieved.

**Peak hour(s)** is the time in which traffic volume is the highest for the day, and is commonly the period of greatest congestion. Peak hours during the weekday are typically from 7:00 to 9:00 AM and 4:00 to 6:00 PM, although some areas may experience peak periods at other times of the day.

**Preferential Parking District** is an area where neighborhood residents are provided unrestricted access to parking on the street and where non-resident motorists have restricted access to on-street parking in the area. In general, residents are permitted to park their automobiles that are identified with a permit at all times of the day or night and non-resident motorists are either not permitted to park on the street in the neighborhood or are permitted to park on the street only during a certain time of day for a limited length of time.

**Ridesharing** generally refers to people sharing the same vehicle to travel to their final destinations, including carpooling and vanpooling.

A **traffic model** is a tool used to forecast the future actions and interactions of a transportation system under a given set of conditions such as land use, population and socioeconomic characteristics, and travel characteristics. Traffic models are usually set up on computers using specialized software packages.

A **Transit Center** is a facility where buses and/or other transit routes converge, enabling passengers to transfer among routes and services.

**Transportation Demand Management (TDM)** are individual actions or comprehensive plans to reduce the number of vehicular trips generated by or attracted to new or existing development. TDM measures attempt to reduce the number of vehicle trips by increasing bicycle or pedestrian trips or by expanding the use of bus, transit, carpool, vanpool or other high occupancy vehicles. TDM measures include, but are not limited to the following:

- building bicycle routes and facilities;
- improving bus routes, building bus shelters, publicizing existing under-utilized transit routes;
- subsidizing bus use or providing free bus tokens to the public or at the private level through employers;
- providing, organizing or subsidizing vanpools;
- providing carpool matching services, subsidizing carpool users, providing preferential parking areas for carpools, or reducing parking costs for carpools;
- providing commuter programs.

**Transportation Systems Management (TSM)** is a methodology for improving local transportation systems that is aimed at creating a more efficient use of the existing roadway system. TSM measures to increase existing system efficiency include signal synchronization, restriping of streets

to add lanes, and adding right or left turn pockets at intersections, and they typically do not include construction of new roadways or the acquisition of additional right-of-way to widen existing roads.

A **trip** is one way travel from an origin to a destination for a particular purpose such as a journey to work or the grocery store. The **trip end** is both the origin and destination of a trip; each trip has two trip ends. A **person trip** is one way travel by one person from an origin to a destination by any mode of travel. **Trip generation** refers to vehicle or person trips produced by or attracted to specific land uses.

**Volume/Capacity Ratio, or V/C Ratio** is the ratio of the volume of traffic to the design capacity of a road to handle those volumes. For example, if the capacity of the road is 20,000 vehicles/day and traffic counts indicate 18,000 vehicles/day are using the road, then the V/C Ratio is 1.8:2.0, V/C Ratios are used to estimate levels of service and congestion for roadways and intersections.



## SECTION 3: HOUSING

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### INTRODUCTION

The provision of adequate and suitable housing for all residents is a fundamental concern in the City of Calimesa. In order to adequately house all residents of the City, the available housing stock must match the housing needs of residents. The Housing Element Profile Report discusses the population and housing characteristics of the City. This discussion includes an analysis of age distribution, race, disability, income, household size, and groups with special housing needs, as well as an analysis of the existing housing stock according to type, overcrowding, tenure of occupancy, costs, and conditions. This analysis will help determine the housing needs of residents in terms of housing types, affordability, number of units, special construction assistance, and other factors. An analysis of the constraints to the development of affordable housing is also provided.

As a new city, there are limited studies and information that specifically pertain to the City and the resources within its corporate boundaries. The available data and information on population and housing characteristics do not correspond to City boundaries. Thus, data from the most recent studies available, including the 1990 Census, the Department of Finance Annual Population and Housing Estimates, City estimates, and studies by various local agencies are utilized in this report, with adjustments to make the data correspond to the City boundaries as much as possible.

The City of Calimesa is within 3 census tracts, although the tract boundaries are larger than the actual city limits. Census Tract 438.02 of the 1990 census data refers to the Calimesa Census Defined Place (CDP), or the central developed portion of the City. Portions of Census Tract 438.03 cover the eastern and southeastern sections of Calimesa and portions of Census Tract 438.05 cover the western and southwestern sections of the City (See Exhibit 3-1). Some of the information provided below utilizes Census data for the central section, with other data for the block groups within Census Tracts 438.03 and 438.05. The boundaries for the block groups cover a wider area than the City. Approximately 48% of the population within block groups 2 and 3 of Census Tract 438.03 and block groups 1 and 2 of Census Tract 438.05 actually reside in the City. Also, 52% of the housing units and 48% of the households are in Calimesa. Thus, it is estimated that under each category, the same percentage of special needs groups in the outlying areas represent the actual needs of the City of Calimesa.

### POPULATION CHARACTERISTICS

The incorporation study for Calimesa in 1990 estimates the resident population at approximately 8,000 persons. This estimate incorporates 1990 census data for the census tracts within the City, adjusted to exclude census blocks outside the City boundaries. The estimates show a 1991 population of 8,105 persons and an annual growth rate of 2.5 percent over the last ten years. Table 3-1 presents these estimates.

**TABLE 3-1  
POPULATION GROWTH**

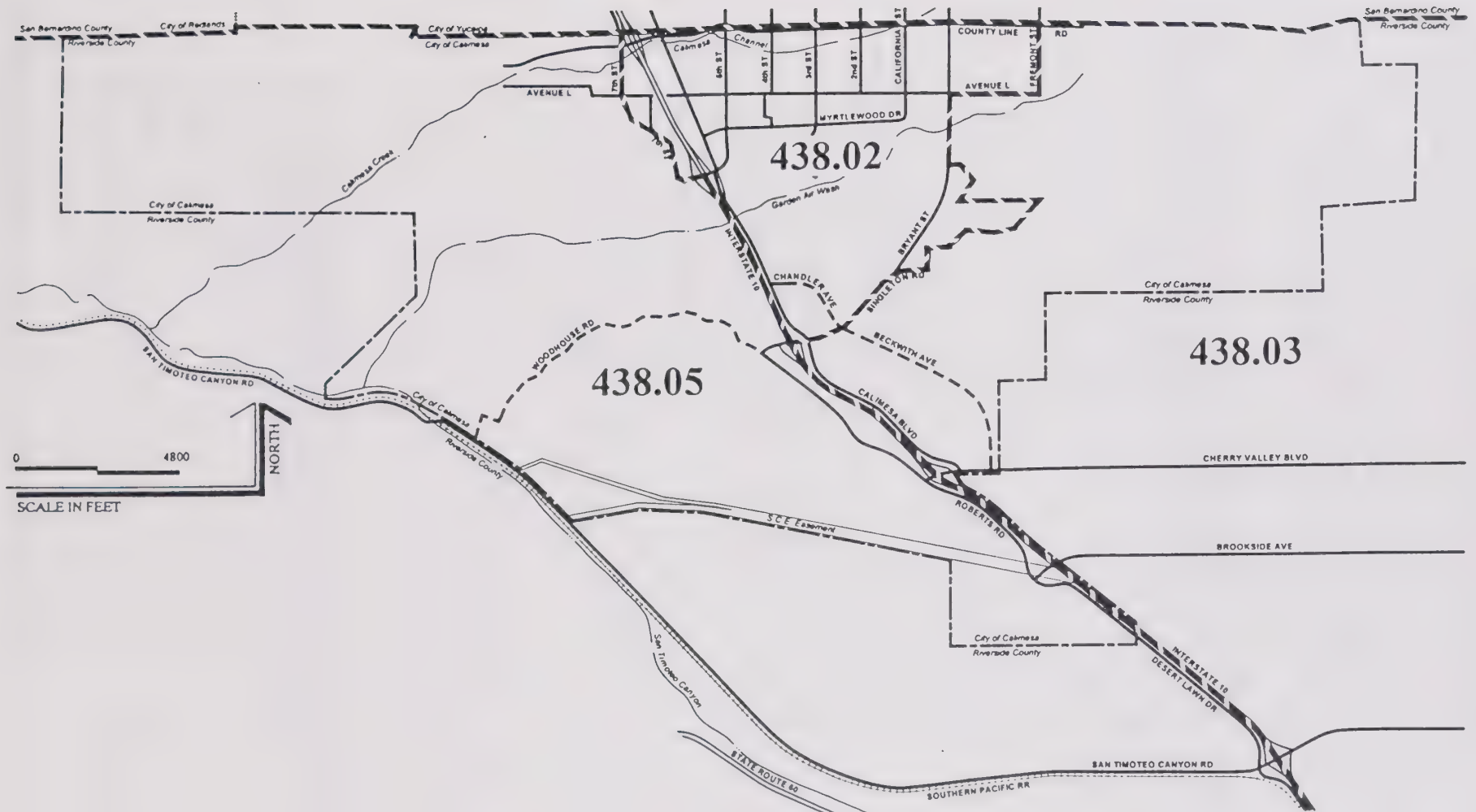
Year	Estimated Population	Annual Growth
1980	6,350	--
1981	6,357	1.0
1982	6,434	1.2
1983	6,453	1.0
1984	6,699	3.8
1985	6,777	1.2
1986	6,914	2.0
1987	7,128	3.1
1988	7,441	4.4
1989	7,708	3.6
1990	7,939	3.0
1991	8,105	2.1

Source: City of Calimesa Planning Department Estimates, 1992.

In contrast, the U.S. Census shows that the population of Riverside County was 664,000 persons in 1980. By 1990, the population had risen to approximately 1,170,413 persons, an increase of over 506,413 persons. This represents an average annual growth rate of 7.6 percent. Thus, Calimesa has been growing at a slower rate than the rest of the County. This may be due to the largely rural and low density development in the City and its distance from the urbanized areas of the County.

The Department of Finance (DOF) estimates show a total population of 7,140 residents in Calimesa as of January 1992 and 7,309 residents as of January 1993. This would be a more accurate estimate of the resident population and will be used for estimates of age group, race, and employment breakdowns.

Assuming the estimated average annual growth rate of 2.5 percent over the past 11-year period continues for the next 20 years, Calimesa would have 8,575 residents in 2000 and 10,369 residents in 2010.







## Age Characteristics

Estimates by the City show that the majority of the City's residents are aged 55 and older. This suggests that the City of Calimesa has a relatively small population of children and young family households and serves as a retirement community for older individuals. Table 3-2 provides a breakdown of the 1992 population, based on the City's estimated population by age group.

TABLE 3-2 POPULATION BY AGE GROUP		
Age Group	1993 Population	Percent
Under 5 years	438	6.0%
5 to 14 years	950	13.0%
15 to 24 years	731	10.0%
25 to 54 years	2,266	31.0%
55 years and above	<u>2,924</u>	<u>40.0%</u>
Total	7,309*	100.0%
* DOF Population Estimate, 1993. Source: City of Calimesa Estimates, 1993.		

Analysis of the Census information shows that the majority of younger residents are located within the City center, and a greater percentage of persons aged 55 and over reside on the outlying areas of the City where a number of mobile home parks and large lots are located.

## Race and Ethnic Characteristics

The majority of Calimesa residents are white. There are no estimates of race breakdown for the City's population, thus, the estimates provided in Table 3-3 are based on the percentage of minorities found in the census tracts covering the City.

Table 3-3 indicates that the population of Calimesa is predominantly white (93.5 percent or 6,834 persons) with approximately 1 percent Black, 1 percent American Indian/Eskimo and 1 percent Asian or Pacific Islander. Approximately 855 persons or 11.7 percent of the population indicated that they are of Hispanic origin. Persons of Hispanic origin may include persons of any race.

TABLE 3-3 POPULATION BY RACE		
Race or Ethnicity	1993 Population	Percent
White	6,834	93.5%
Black	95	1.3%
American Indian, Eskimo	73	1.0%

TABLE 3-3 POPULATION BY RACE		
Race or Ethnicity	1993 Population	Percent
Asian or Pacific Islander	80	1.1%
Other	227	3.1%
<b>TOTAL</b>	7,309	100%
Hispanic Origin (of any race)	855	11.7%
Source: 1990 U.S. Census and DOF Population Estimate, 1993.		

## Employment

There is no data on the City's labor force. It is assumed that the percentage of the population in the labor force as found in the developed portions of the City (Census Tract 438.02) is the same percentage for the entire City's labor force. Thus, approximately 77.1 percent of the population in 1993 is included in the City's labor force or 5,635 persons. This includes all persons aged 16 and over. Of this population, 2,648 persons or 47 percent are employed. Table 3-4 provides a breakdown of employees by occupation, as based on estimates by the City. The majority of residents are employed as craftsmen/machinist, executives/managers and sales/clerical employees.

TABLE 3-4 1993 EMPLOYMENT CHARACTERISTICS		
Occupation	Employees	Percent
Executives/Managers	662	25%
Professionals/Technical	53	2%
Sales/Clerical	794	30%
Farm/Forestry/Fishing	318	12%
Craftsmen/Machinists	556	21%
Laborers/Transportation	212	8%
Other	53	2%
<b>TOTAL</b>	2,648	100.0%
Source: City of Calimesa Estimates, 1993.		



## Disabled Persons

Disabled persons are identified as those with visual and hearing impairments and mental handicaps. Persons with limited mobility have special housing needs. These include ramps instead of stairs, elevators for units with 2 or more stories, modified bathrooms, wider doorways, lower shelves, etc. Recent changes in State law require all new construction to be accessible to the handicapped, but existing housing units are unlikely to be accessible or designed for the handicapped. Table 3-5 provides the number of handicapped persons within Census Tract 438.02 and the relevant block groups of Census Tracts 438.03 and 438.05.

TABLE 3-5 DISABILITY STATUS OF NON-INSTITUTIONALIZED PERSONS			
	CT 438.02	CT 438.03*	CT 438.05*
Persons 16 to 64 years	2,396	2,016	878
With a Mobility or self-care limitation	89	111	63
With a Mobility Limitation	38	96	8
Self-care Limitation	69	75	55
With a Work Disability	284	238	51
In Labor Force	128	46	10
Prevented from Working	131	167	41
Persons 65 years and over	1,176	977	398
With a Mobility or self-care limitation	238	74	111
With a Mobility Limitation	138	60	46
With a Self-care Limitation	131	22	88
*Block Groups 1 and 2 for CT 438.05 and Block Groups 2 and 3 for CT 438.03. Source: 1990 U.S. Census			

Persons with disabilities are often prevented from the variety of available housing due to the lack of accessibility or features to accommodate their special needs. The provision of design features that would allow disabled persons to occupy any housing unit would provide them with equal opportunity to affordable and appropriate housing.

## Farmworkers

Farmworkers are considered a special housing group. They include employees of nurseries, stables, and agricultural and livestock operations in the City. Farmworkers generally have limited and seasonal incomes which present a need for affordable housing near their places of work and on a seasonal basis, rather than year-round. The 1990 Census indicates that 155 persons within Census Tract 438.02 and the relevant block groups of Census Tracts 438.03 and 438.05 are employed in farming occupations.

## Homeless Persons

Homelessness is a growing national concern that has reached crisis proportions in many parts of the country. The causes of homelessness are many and complex. However, the major substantiated causes appear to be unemployment and the breakdown of the family as a social and economic unit. Other factors contributing to homelessness include the deinstitutionalization of the mentally ill, drug and alcohol abuse, economic displacement, lack of affordable housing and domestic violence. In an effort to assist the homeless population, the State of California has mandated that the issue homelessness be addressed in the Housing Element.

The County Sheriff's Department reports that only 1 homeless person is found in Calimesa. This single male stays near a large pepper tree close to the County Line Road off-ramp for Interstate 10 and generally moves about the City finding shelter in abandoned buildings or under the freeway overpass. On occasion, some transients pass through the City. However, they usually don't remain in the City for extended periods of time. In general, the homeless population in the Riverside area is not very large.

Community Action, a Riverside County Agency, provides a homeless shelter referral service and a Homeless Program which monitors homeless shelters throughout Riverside County. The nearest program providing services for the homeless in the Calimesa area is approximately seven miles from Calimesa, in the City of Beaumont. The H.E.L.P. Center is located at 296 California Street in Beaumont. H.E.L.P. provides overnight vouchers at two Beaumont motels and serves anyone in need of shelter. Vouchers may be renewed for up to three days. The nearest homeless shelters are in the cities of Moreno Valley and Hemet, approximately 15 and 20 miles away, respectively. The Shelter for the Homeless, located at 13748 Pecan Street, Moreno Valley, is a 60-day transitional program for families and singles with children. The facility houses 18 to 20 families and provides meals, laundry facilities and self-help programs. The Hemet Valley Restart program, located at 1000 State Street, Hemet, makes referrals to a number of church shelters, rotating on a weekly basis. The church shelters provide day to day shelter for anyone in need of housing. The churches provide a daily meal and the length of stay is based on need. The Restart program also operates two transitional housing facilities in Hemet. The transitional homes have 5 units each and have separate facilities for women with children and for single men.

## HOUSEHOLD CHARACTERISTICS

A household is a group of related or unrelated individuals sharing a dwelling unit. A single person in an apartment is a household as much as a family of four. The California Department of Finance estimates the City of Calimesa had 7,301 persons in households in 1993. This translates to 2,974 households at the average household size of 2.455 persons per household. Most households in the City consisted of family households, where household members are related by birth or marriage. Only 6 persons were confined to group quarters in 1992.

The County estimates future household growth in Calimesa at approximately 4,060 households by 1999. This is considered high when historical population growth has only been 2.5 percent annually.



The City estimates approximately 70 new households per year or a 2.4 percent increase, for a total of 3,324 households in 1998.

Special housing needs in the City include housing for large households, female-headed households, minority households, elderly households, disabled persons, and low income households. There are no other special needs households in Calimesa.

### **Large Households and Overcrowding**

The California Department of Finance estimates an average household size of 2.455 persons per household in Calimesa. This is lower than the Riverside County average household size of 2.941 persons per household, and reflects the city's large elderly population where children have left home. The average household size at the City center is greater than the average household size of outlying areas. This means that larger households are found at the City center than the outlying areas, when comparing household size by census tract.

Households with 5 members or more are considered large households. They often require larger dwelling units that may not be available at costs they can afford. The increase in the number of household members does not proportionately increase the earning power of the household. Often, it means an additional dependent child. Large households present a need for large but inexpensive housing units in the City. The 1990 census shows that there are 195 large households in the central portion of the City and a total of 204 large households within the relevant block groups. There are also 263 owner households and 136 renter households which have five member or more (large households). Since these estimates apply to the entire block groups covering the City, the actual number of special needs households that reside within City limits is actually lower. These households (especially renter households) need larger and more affordable units in the area.

Tenure of large and overcrowded households in the central City census tract and the relevant block groups shows that there are 82 owner households and 90 renter households that live in overcrowded conditions. Overcrowding is defined as having 1.01 persons or more per room in a dwelling unit. Overcrowding occurs when there is no housing with enough rooms and at the right price to accommodate households in the area. Overcrowding is more common among large households because of limited income. Lower income households are also more likely to live in overcrowded conditions because they cannot afford the larger sized units that are more suitable for their household's size.

Overcrowding is considered a housing concern because it is an undesirable living condition and because it leads to a faster deterioration of housing. Approximately 90 households are living in overcrowded conditions in the central portion of the Calimesa. Approximately 82 overcrowded households are estimated within the relevant block groups in the 2 outlying census tracts.

Large households are likely to live in overcrowded conditions. This could present health risks to its members and should be alleviated by better accommodations and larger but affordable housing units.



## **Female Headed Households**

Single parent households have special housing needs due to their need to be near schools, day care centers, recreational facilities and public transit systems. Female-headed households who have low incomes present a need for affordable housing near these services. In 1990, the U.S. Census reported 93 female-headed households in central Calimesa. Of these, 45 (51.23 percent) female-headed households were below poverty level and 74 of the 93 households (80 percent) had children under 18 years of age. A total of 138 female-headed households are found within the relevant block groups of Census Tracts 438.03 and 438.05.

Female-headed households are also often low income households. They need housing near schools, day care centers, recreational facilities, and public transit. Multi-family projects near commercial areas could meet this need.

## **Minority Households**

The population of Calimesa is predominantly white. This means there are limited minority households in the City. Census data on minority households show that there are 50 minority households in central Calimesa and 76 minority households within the relevant block groups. Minority households are often subject to discrimination and may find it difficult to find appropriate housing. The availability of fair housing services and information on tenant rights would reduce discrimination in housing.

## **Elderly Households**

Elderly households are households with a member aged 65 or over. Their housing needs are often related to their disability and limited mobility, as well as their fixed incomes. Please refer to the disability of elderly persons, as provided in Table 3-5. Elderly households are often unable to afford constant increases in housing rents and major repairs for housing.

The 1990 Census reported 749 householders aged 65 years and over in the central portion of the City. And a total of 899 elderly households are within the relevant block groups in the two outlying census tracts. Also, there are 1,479 owner households and 169 renter households have a householder aged 65 and over. The Senior Center in the City has conducted a house-to-house survey in the area to determine the presence and needs of senior citizens. It was found that most senior citizens in the community are owner households and have incomes which are sufficient to provide for their basic needs.

Elderly households have special needs based on mobility, disability, fixed and limited incomes and social/recreational needs. The development of senior housing projects and services for seniors would provide senior citizens a more conducive environment for retirement living.

## Household Income

Household income characteristics are classified according to definitions used by the Department of Housing and Urban Development (HUD). The definitions involve relationships to the regional median income and family size adjustment factors.

Median Income in Riverside County (1993)	\$41,100
Very Low Income (less than 50% of the County Median)	\$20,550 or less
Low Income (between 50% and 80% of the County Median)	\$20,550 to \$32,880
Moderate Income (between 80% and 120% of the County Median)	\$32,880 to \$49,320
High Income (more than 120% of the County Median)	\$49,320 or more

The 1990 median household income in the central city was approximately \$29,219. This is 71 percent of the 1992 Riverside County median income of \$41,100. The median income for the relevant block groups show wide variations. The western and southeastern block groups are within the low income category; the eastern block group is within the high income category. The estate homes on the east side is reflective of the high income households in that area. And the southwestern block groups is within the moderate income category.

Approximately 29 percent of the households or 1,147 households in the central area had incomes of \$20,550 or less and are considered very low income households. Approximately 19 percent or 747 households had incomes of \$20,550 to \$32,880 (low income); 23 percent or 910 households had incomes of \$32,880 to \$49,320 (moderate income) and; 30 percent or 1,194 households had incomes of \$49,320 or more (high income). Also, approximately 8.2 percent of the area population had incomes below poverty level. See Table 3-6.

TABLE 3-6 HOUSEHOLD INCOME CHARACTERISTICS (1990)				
Income Category	CT 438.02	CT 438.03*	CT 438.05*	Total
Very Low Income	559	444	144	1,147
Low Income	407	216	124	747
Moderate Income	489	265	156	910
High Income	469	547	178	1,194
<b>TOTAL</b>	1,924	1,472	602	3,998
Below Poverty Level	7.7%	9.9%	5.2%	8.2%
*Block Groups 1 and 2 for CT 438.05 and Block Groups 2 and 3 for CT 438.03. Source: U.S. Census and David Evans and Associates, 1993.				

Low income households present a special housing need for affordable units. Excessive rents for these households often mean less money for food, medicine, clothing and other essentials. Low income households are also less likely to spend for home improvement projects, repair and maintenance.

Low income households are prevented from appropriate housing due to their limited buying power. The availability of cheap housing or payment assistance will benefit these households. The increase in affordable housing in the City can be accomplished by encouraging developers to build units to accommodate these special households, and in finding agencies and funding sources for the development of affordable housing or for housing assistance. The City will explore these options in future housing programs.

### **Public Assistance**

The 1990 Census reports that 161 households in the central City receive public assistance and 879 households receive income from social security. The combined total for the relevant block groups is 979 households receiving social security and 112 households receiving public assistance.

Records at the County Department of Social Services show that 217 persons/households in Calimesa receive one or a combination of AFDC, food stamps, Medical, and homeless assistance from their agency. The County Housing Authority estimates that approximately 13,089 applications are currently on their waiting list for Section 8 certificates or vouchers, even though sign-ups were discontinued since June 1992. Thus, the demand for affordable housing and housing assistance in the area is far beyond the availability of the existing affordable housing stock and federal funds.

### **HOUSING STOCK CHARACTERISTICS**

The majority of housing units in Calimesa are single family detached units and mobilehomes. The 1993 Population and Housing Estimates by the Department of Finance show that there were 3,131 housing units within the incorporated City boundaries. Of these, 1,843 were single-family detached and 66 were single-family attached units; 64 were found in projects with 2 to 4 units, 97 units in projects with 5 units or more or 161 multi-family housing units. There are also 1,061 mobile homes. Of the total units 2,974 were occupied for a vacancy rate of 5.01 percent.

The census showed 1,959 housing units in the central Calimesa area in 1990. Thus, there are approximately 1,172 units in the outlying areas.

Aside from permanent housing, the City has 2 motels with a total of 59 rooms. These provide temporary and transitional housing opportunities. There are no public housing projects in Calimesa, nor are there units developed with affordability restrictions that could be at risk for conversion.



## Housing Tenure

Housing in Calimesa is primarily owner-occupied, reflective of the predominant type of housing: single family detached units. Table 3-7 shows housing tenure by census tract.

TABLE 3-7 HOUSING TENURE (1990)				
Tenure	CT 438.02	CT 438.03*	CT 438.05*	Total
Owner-Occupied	1,478	1,283	470	2,761
Renter-Occupied	401	157	128	686
Vacant	80	104	81	265
<b>TOTAL</b>	<b>1,959</b>	<b>1,544</b>	<b>679</b>	<b>4,182</b>
*Block Groups 1 and 2 for CT 438.05 and Block Groups 2 and 3 for CT 438.03. Source: 1990 U.S. Census.				

## Age of Housing Stock

The age and condition of housing units help to determine the need for rehabilitation. Without proper maintenance, housing condition is expected to deteriorate over time. The age of housing is also an indication of structural integrity, as older buildings are not likely to be built to current building standards for fire and earthquake safety.

The 1990 Census shows that the majority of the housing stock (744 units or 38 percent) within the central city was between 22 to 31 years old. The data also shows that 42 units are 52 years or older. The older units are found near the City center and on scattered large lots. Newer units are located along the golf course and on estate lots on the east side. Outlying areas have a predominance of newer units within subdivision developments and a few older homes on large lots. Older units are likely to need repairs due to age deterioration and are unlikely to be built to current structural, fire, and seismic codes. They present risks to residents from earthquake damage, and electrical and structural hazards. Table 3-8 provides a breakdown of housing stock in the area by age.

TABLE 3-8 AGE OF HOUSING STOCK			
Year Structure Built (Age)	CT 438.02	CT 438.03*	CT 438.05*
1980 - 1990 (10 yrs or less)	213	324	290
1970 - 1979 (11 to 21 years old)	546	544	81
1960 - 1969 (22 to 31 years old)	744	298	136
1950 - 1959 (32 to 41 years old)	287	135	117

**TABLE 3-8**  
**AGE OF HOUSING STOCK**

Year Structure Built (Age)	CT 438.02	CT 438.03*	CT 438.05*
1940 - 1949 (42 to 51 years old)	127	80	49
Prior to 1939 (52 yrs old or more)	42	163	6
<b>TOTAL</b>	1,959	1,544	679
*Block Groups 1 and 2 for CT 438.05 and Block Groups 2 and 3 for CT 438.03. Source: 1990 U.S. Census			

## Housing Condition

An important indicator of the existing condition of the housing supply is the number of structurally substandard units, or units needing rehabilitation or replacement. While the majority of the housing units within the City are in relatively good condition, as the existing stock ages, the number of housing units needing rehabilitation is expected to increase. Residential neighborhoods between County Line Road and Avenue L West were primarily developed during the 1940's and 1960's on large lots. They contain many of the City's older housing units. Recent infill development in these neighborhoods is occurring on scattered, vacant lots. Neighborhoods south of Avenue L developed during the 1970's and 1980's, and largely consist of newer housing units on uniform sized lots in subdivisions.

In December 1992, a survey of existing housing conditions was conducted. The exterior condition of the single family homes, multiple-family units, and mobile homes, throughout Calimesa, was evaluated on their need for rehabilitation. The criteria used consisted of four categories:

- Category 1: Substandard, rehabilitation would not be economical and replacement is recommended.
- Category 2: Major repairs needed, but economically feasible to rehabilitate.
- Category 3: Minor repairs needed.
- Category 4: Structurally sound with little or no repairs needed.

Based on the survey, 112 of the City's housing units or approximately 3.6 percent were classified as Category 3 or requiring minor repairs, 31 units were classified Category 2 or requiring major repairs, and 3 units were considered Category 1 or deemed substandard. Table 3-9 presents the results of the survey.

TABLE 3-9 CITY OF CALIMESA: SURVEY OF HOUSING CONDITIONS	
Category	Number
Minor Repairs	112
Major Repairs	31
Substandard	3
<b>TOTAL</b>	<b>146</b>
Source: David Evans and Associates, Inc. 1992.	

The survey data was analyzed at the neighborhood level to determine the need for specific areas where rehabilitation efforts should be concentrated. In general, the quality of housing in the City is in sound condition. The majority of repair needs occurs in 2 northern areas of the City. The first area is west of Interstate 10, and the second encompasses the area between Calimesa Boulevard, County Line Road, Fremont Street, and Avenue L West. Both of these areas were developed prior to the initiation of state and local subdivision laws. Aside from the occasional infill development, these areas mainly consist of large, irregular lots or subdivided parcels that have created unusually small or narrow lots and lots with limited access. In addition, agricultural structures such as sheds, troughs, and fences are present in these areas.

### Vacancy

Single persons, newly-married couples and elderly households need smaller units than households with school age children. The availability of vacant housing units provides choices for different household types to accommodate changing needs. The State Department of Finance estimates a 5.53 percent vacancy rate in 1992 or 171 vacant units. SCAG set the ideal vacancy rate at 2 percent for single family units and at 5 percent for multifamily units. Thus, the City has adequate vacant housing for households to find appropriate housing.

### Housing Costs and Rents

Affordability is a major consideration in providing suitable housing. The cost of housing itself is not a problem, unless households in the area cannot afford these units. Affordability is defined as paying 30 percent or less of the gross monthly income for housing. Overpaying households are households with lower incomes (80 percent or less of the county median income) and paying more than 30 percent for housing.

According to the 1990 Census, the median rent for the central City is \$499 and ranges from \$470 to \$630 for the outlying areas covered by the various block groups. Rents from advertized units are provided in Table 3-10. The data shows that the median rent is \$475 for a one-bedroom unit and \$950 for a four-bedroom unit.



Comparison of rents with fair market rents established by the Department of Housing and Urban Development for Section 8 Housing vouchers shows that rents in the City are lower than HUD rent limits. Thus, there are opportunities for Calimesa residents to use the federal Section 8 rent assistance on housing voucher programs. The limited availability of federal and state funds for these programs may serve as a hindrance to participation.

TABLE 3-10 RENTS IN THE CALIMESA AREA BY NUMBER OF BEDROOMS (1992)			
Housing Type	Median Rent	Average Rent	HUD Fair Market Rent Limit (1993)
One-bedroom Unit	\$475	541.50	\$822
Two-bedroom Unit	\$600	699.00	\$1,027
Three-bedroom Unit	\$825	722.50	\$1,192
Four-bedroom Unit	\$950	952.00	\$1,356
Source: News-Mirror, Calimesa Edition, November through December, 1992.			

The compilation of rents for advertized units in the area shows Calimesa had a median rent of \$1,000 for vacant units. Median rents for units in adjacent cities indicate rents in Calimesa are higher than adjacent cities (see Table 3-11).

TABLE 3-11 RENTS IN THE AREA (1992)	
City	Median Gross Rent
Calimesa	\$1,000.00
Yucaipa	\$727.50
Beaumont	\$750.00
Other	\$750.00
<b>TOTAL REGION</b>	
Source: News-Mirror, Calimesa Edition, Nov. - Dec., 1992.	

## Housing Sales

Housing in Calimesa is generally less expensive than housing in more urbanized areas of Riverside and San Bernardino counties. This is because the area is largely rural and some distance from urban services and shops. Data from the Construction Industry Research Board (CIRB) for 1992 shows housing sales in the City of Calimesa were limited. The median cost of housing ranged from \$76,000 to \$155,000. This information is provided in Table 3-12.

TABLE 3-12 HOUSING SALES IN CALIMESA BY NUMBER OF BEDROOMS (1992)			
Housing Type	Median Price	Average Price	Range (000's)
One-bedroom Unit	\$76,000	\$76,000	\$72 - \$80
Two-bedroom Unit	\$106,500	\$111,136	\$72 - \$169
Three-bedroom Unit	\$139,000	\$165,828	\$119.5 - \$255
Four-bedroom Unit	\$155,000	\$155,690	\$109 - \$195
Source: California Market Data Cooperative, CIRB, 1992.			

The recent slump in housing sales may be a factor in lower housing prices, although housing units in Calimesa are expected to continue to be lower than more developed areas in Riverside and San Bernardino counties.

### Overpayment

The percentage of income spent for housing usually increases as the income decreases. This is because low income households are more likely to be overpaying for housing than moderate and higher income households. Overpayment limits the low-income household money available for home improvements, food, medicine and clothing needs. The Census defines overpayment as paying more than 30 percent of the household income for housing when the gross income is less than 80 percent of the regional median income. Table 3-13 provides a breakdown of households by housing payment.

TABLE 3-13 HOUSING PAYMENT PERCENTAGE			
Housing Payment as a Percentage of Income	Owner Occupied	Renter-Occupied	Total
CT 438.02			
Less than 20 percent	562	127	689
20 to 24 percent	192	63	255
25 to 29 percent	74	36	110
30 to 34 percent	59	34	93
35 percent of more	112	130	242
CT 438.03*			
Less than 20 percent	427	40	467
20 to 24 percent	82	0	82
25 to 29 percent	57	18	75
30 to 34 percent	33	10	43
35 percent of more	173	43	216

TABLE 3-13 HOUSING PAYMENT PERCENTAGE			
Housing Payment as a Percentage of Income	Owner Occupied	Renter-Occupied	Total
CT 438.05*			
Less than 20 percent	91	66	157
20 to 24 percent	13	19	32
25 to 29 percent	24	0	24
30 to 34 percent	22	0	22
35 percent or more	28	11	39
*Block Groups 1 and 2 for CT 438.05 and Block Groups 2 and 3 for CT 438.03. Source: 1990 U.S. Census			

### At-risk Units

The City does not have any multi-family dwelling units that are at-risk of conversion. The City does not have residential projects funded by federal housing programs. Also, the City does not have projects funded by State bonds or local revenue bonds. It also has not utilized Community Development Block Grant funds or redevelopment set-aside funds for multi-family rental units. The City has not granted density bonuses to date, nor has it developed an inclusionary housing or in-lieu fee program. There are no housing units with affordability restrictions in Calimesa. Attachment A is a checklist to confirm the lack of at-risk units in the City.

### Existing Housing Needs

The existing housing need of Calimesa is defined as the number of households that are overpaying for housing. These households need more affordable housing units than the ones they are currently occupying, in order to reduce their housing expenses. Their housing expenses could also be reduced by the availability of assistance payments. As shown above, approximately 335 households in the central city are paying 30 percent or more for housing. Also, 320 households in the relevant block groups are paying 30 percent or more for housing.

Table 3-14 breaks down housing payments by income range. Overpaying households are lower income households (earning \$28,800 or less) and paying 30% or more for housing. The Census data shows that 243 households in the central City (CT 438.02) are overpaying for housing and 177 households in the relevant block groups are overpaying. Since 48% of the total households in the relevant block groups are within Calimesa, then there are 85 overpaying households in the City's outlying areas. This means that a total of approximately 328 households are considered as the City's existing housing need.



**TABLE 3-14  
HOUSEHOLD INCOME AND HOUSING PAYMENTS**

Income Range by Housing Payment	CT 438.02		CT 438.03*		CT 438.05*	
	Owner Occupied	Renter Occupied	Owner Occupied	Renter Occupied	Owner Occupied	Renter Occupied
Less than \$10,000						
less than 20%	5	0	7	0	0	0
20% to 24%	8	0	0	0	0	0
25% to 29%	20	0	17	0	0	0
30% to 34%	6	0	6	5	6	0
35% or more	51	55	23	38	0	0
not computed	12	0	11	7	0	11
\$10,000 to \$19,999						
less than 20%	117	10	21	0	12	0
20% to 24%	22	0	0	0	0	0
25% to 29%	0	11	7	11	0	0
30% to 34%	8	15	6	0	0	0
35 % or more	0	66	54	0	0	0
not computed	0	0	11	0	0	7
\$20,000 to \$34,999						
less than 20%	151	43	127	8	12	22
20% to 24%	40	63	28	0	0	8
25% to 29%	9	6	6	7	7	0
30% to 34%	26	0	0	0	0	0
35 % or more	43	9	29	5	28	11
not computed	0	0	0	11	0	0
\$35,000 to \$49,999						
less than 20%	90	30	55	8	18	19
20% to 24%	21	0	22	0	5	11
25% to 29%	16	19	9	0	0	0
30% to 34%	19	19	6	5	6	0
35 % or more	18	0	47	0	0	0
not computed	0	0	0	0	0	0
\$50,000 or more						
less than 20%	199	44	224	24	49	25
20% to 24%	101	0	24	0	8	0
25% to 29%	29	0	25	0	17	0
30% to 34%	0	0	21	0	10	0
35 % or more	0	0	20	0	0	0
not computed	0	11	0	8	0	0

\*Block Groups 1 and 2 for CT 438.05 and Block Groups 2 and 3 for CT 438.03.

Source: 1990 U.S. Census

## Future Housing Needs

The future housing need of Calimesa refers to the number of units that may be needed by future residents in the City. Since Calimesa was not incorporated when the Regional Housing Needs Assessment (RHNA) by SCAG was completed in 1989, and the RHNA for the 1994-1999 period has been postponed until 1996, the City has provided its own estimate of future housing needs. The projection of future housing needs was based on the City's estimated growth of 2.4 percent per year, which reflects the growth rate during the past few years. This means an increase on 350 households from 1993-1998 or 70 households per year. The City estimates that 3,324 households would be found in the City by 1998.

Because the City has a high vacancy rate, no vacancy adjustment is needed in the future. Also, it is assumed that housing units will not be demolished unless they are replaced by equivalent housing.

The City assumes that the income distribution of these future households will reflect the income distribution in the central City as of 1990. Thus, the additional 350 households are broken down by income category, based on 1990 census information on the income distribution found in the central City or Census Tract 438.02. Table 3-15 presents these estimates.

TABLE 3-15 FUTURE HOUSING NEEDS		
Income Category	Housing Units	Percent
Very Low Income	102	29.0
Low Income	74	21.2
Moderate Income	89	25.4
High Income	85	24.4
TOTAL	350	100.0
Source: David Evans and Associates, Inc., 1993.		

## CONSTRAINTS TO LOW-INCOME HOUSING PRODUCTION

There are a variety of factors that constrain low income housing production. They include government, market and other forces that increase housing costs to developers and households. These constraints also limit the type and variety of housing that are built in the City. Often, these factors lead to the loss of affordable housing units that could accommodate low income households in the area.

## Governmental Constraints

Governmental actions which discourage housing construction or indirectly increase housing costs serve as constraints to meeting the housing needs of the City. The identification of factors which may serve as governmental constraints will lead to positive changes in City actions and operations, in order to encourage residential construction and affordable housing projects.

**Land Use Controls.** Land use controls constrain housing production by limiting land designated for residential development, lowering allowable densities, and imposing fees for housing construction. The zoning ordinance poses the largest constraint on housing, as it regulates where residential uses may or may not be constructed and determines development standards for building construction.

The City of Calimesa adopted the Riverside County Zoning Ordinance upon incorporation. After several amendments to the Zoning Ordinance, the City now has seven residential zones. The residential zoning categories include: Light Agriculture (A-1, A-1-2, and A-1-5), Single Family Dwelling (R-1), Residential Agriculture (R-A), Multiple Family Dwelling (R-2), Multiple Family Dwelling 4,000-Square-Foot Lot (R-2-4000), General Residential (R-3), Mobile Subdivision and Mobilehome Park (R-T), Mobilehome Subdivision and Mobilehome Park 8,700 (R-T 8,700) and Controlled Development Areas (W-2).

Table 3-16 provides a breakdown of the City by zoning category and estimates the maximum number of housing units that may be built in City. As estimated, approximately 27,688 units could be accommodated at theoretical buildout of the City.

TABLE 3-16 RESIDENTIAL BUILDOUT			
Zone	Acres	Allowable Density	Estimated Housing Capacity
Light Agricultural (A-1)	792.57	1 du/ac	792 du
Agricultural-min. 2 acre lots (A-1-2)	6.82	1 du/2 ac	3 du
Agricultural-min. 5 acre lots (A-1-5)	382.68	1 du/5 ac	76 du
Residential Agricultural (R-A)	1,189.22	2 du/ac	2,378 du
Single-Family Dwelling (R-1)	739.38	4 du/ac	2,958 du
Multiple Family Dwelling (R-2)	183.60	17 du/ac	3,121 du
Multiple Family Dwelling, 4,000 sq. ft. lot size (R-2-4000)	10.72	11 du/ac	118 du
General Residential (R-3)	5.53	20 du/ac	111 du



**TABLE 3-16  
RESIDENTIAL BUILDOUT**

Zone	Acres	Allowable Density	Estimated Housing Capacity
Mobilehome Subdivision and Mobilehome Park (R-T)	393.43	17 du/ac	6,688 du
Controlled Development Areas (W-2)	1,291.03	2 du/ac	2,958 du
Oak Valley Specific Plan Area	3,932.55	variable	8,861 du
Source: David Evans and Associates, 1993.			

The land use and zoning controls of the City are not considered a constraint to housing development due to the wide range of allowable densities and the vast amount of vacant land. Development controls may increase the costs of housing construction, as developers generally add these costs to housing prices and rents. But this increase in costs is considered minor when compared to the benefits in terms of public health and safety, amenity, and compatibility of development.

**On and Off-site Improvements.** Development standards and required on and off-site improvements for dwelling units influence the cost of housing. The zoning ordinance regulates building height, minimum lot sizes, maximum lot coverage, parking and yard setbacks. These restrictions add to building costs. Table 3-17 summarizes the residential development standards in the City. These costs may increase housing prices and rents, but the low prices and rents in the City suggest that the costs attributed to compliance with the City's development standards does not significantly increase housing costs in Calimesa.

**TABLE 3-17  
DEVELOPMENT STANDARDS**

Maximum Building Height	Minimum Lot Area	Minimum Lot Widths	Maximum Lot Coverage	Minimum Parking	Minimum Setbacks and Yard Area
<b>Single-Family Dwelling (R-1)</b>					
2 stories/35 ft.	7,200 sq. ft.	60 ft. X 100 ft.	None	2 spaces per DU	Front - 20 ft. Side - 10 to 20 percent of lot width (refer to ord.) Rear - 10 ft.
<b>Residential Agriculture (R-A)</b>					
2 stories/35 ft.	20,000 sq. ft.	100 ft. X 150 ft.	None	2 spaces per DU	60-foot frontage

**TABLE 3-17  
DEVELOPMENT STANDARDS**

<b>Multiple Family Dwelling (R-2) and (R-2-4,000)</b>					
R-2 = 2 stories/ 35 ft.	7,200 sq. ft./ 2,500 sq. ft. per DU		60 percent	2 spaces per DU	Front - 20 ft. Side - 10 to 20 percent of lot width (refer to ord.) Rear - 10 ft.
R-2-PRD= 3 stories/40 ft.	4,000 sq. ft. for R- 2-4000				
<b>General Residential (R-3)</b>					
50 ft. Special Use - 75 ft.	7,200 sq. ft.	60 ft. X 100 ft.	50 percent	2 space per DU	Front - 10 ft. + 2 ft. per ft. in excess of 35 ft. high Side - 5 ft. + 2 ft. per ft. in excess of 35 ft. high Rear - 10 ft. + 2 ft. per ft. in excess of 35 ft. high
<b>Mobilehome Subdivision and Mobilehome Park (R-T) and (R-T-8,700)</b>					
3 stories/ 40 ft.	7,200 sq. ft. or 3,600 sq. ft. with community open area provided 8,700 sq.ft for R- T-8,700 zone	60 ft. X 100 ft. or 40 ft. X 100 ft. with community open area provided	None		
Source: Riverside County Zoning Ordinance, October 1989; City of Calimesa, 1993.					

The City's development standards do not preclude the development of various housing types. Thus, they are not considered to represent undue constraint to housing development.

In lieu of an adopted General Plan, on and off-site developments that are required of new developments are now part of the environmental and design review process. These requirements are often site-specific and dependent on the availability of existing infrastructure or impacts to current service levels in the area. Thus, development in outlying areas are likely to require more extensive infrastructure development. This serves as a deterrent to leapfrog development and may be considered desirable because it limits costly expansion/extension (sewer, water, gas, power, drainage lines, roads, etc.) and untimely expansion of scattered service areas (police, fire protection, etc.).

Goals and policies in the proposed Land Use Element call for the provision of adequate utility services to development prior to approval through coordination with utility and public service providers. These policies represent good planning practices and are not expected to increase the costs of housing development in the City.

**Codes and Code Enforcement.** Building construction in the City of Calimesa is regulated by the Uniform Building Code, the Uniform Plumbing Code, the Uniform Fire Code and the Mechanical Code and the 1990 National Electric Code, Title 24 and 35 of the State Energy and Insulation Regulations and the Handicap Persons Standards for new development. These codes promote public health and safety and ensure that safe and decent housing is constructed in the City of Calimesa. They serve to protect residents from hazards and risks and are not considered as undue constraints to housing production.

Code enforcement in Calimesa is mainly driven by complaints. Also, city officials and staff may raise problems and concerns which would be subject to code enforcement. The Planning Department is responsible for most code enforcement proceedings. If site investigations identify any violations, a letter is sent to the property owner requesting compliance within 30 days. After 30 days, a second letter is sent requesting compliance within 10 days. After this second notification, abatement procedures are made in consultation with the City Manager.

**Fees and Exactions.** Fees increase housing development costs to the developer. In order to make the development project feasible, these costs are often passed on to the homebuyer and tenant. While City fees offset the cost of development review for compliance with City codes and regulations, they could serve as constraints to the production of affordable units. The schedule of planning and development fees in Calimesa is provided in Table 3-18.

TABLE 3-18 DEVELOPMENT FEE SCHEDULE					
Type of Application		Base Fee	Per Lot	Per Acre	Other Fees if Applicable
Appeals	Appeal to PC, EAPC, or Board	351			+\$215 If Fire Conditions Appealed +\$435 If Road Conditions Appealed +\$650 If Both Fire & Road Conditions Appealed
Change of Zone		3,621			+\$641 If Traffic Study Required
Conditional Use Permit	General	5,928	5		+641 If Traffic Study Required
	Mobilehome Park	5,873	7		+641 If Traffic Study Required
	Recreational Vehicle Park	5,721	7		Add \$52 P/Lot if Improvement P/C +\$641 If Traffic Study Required
Extension of Time	Commercial	414			
	WECS, Variance				
	Conditional Use Permits	512			+641 If Traffic Study Required
	Public Use Permits	464			+641 If Traffic Study Required
General Plan Amendment	With Specific Plan	5,583			
	Without Specific Plan	5,714		38	



**TABLE 3-18  
DEVELOPMENT FEE SCHEDULE**

Type of Application		Base Fee	Per Lot	Per Acre	Other Fees if Applicable
<i>Revised Permits</i>	With Public Hearing	886			+\$641 If Traffic Study Required
	Without Public Hearing	496			+\$641 If Traffic Study Required
<i>Certificate of Zoning Compliance</i>	Without Directors Hearing	304			
	Add if Directors Hearing Required	283			Outdoor Advertising
<i>Plot Plans Development Plan Review</i>	Exempt from CEQA/ Government Agency Review	2,697			+\$641 If Traffic Study Required
	Exempt from CEQA/ Planning Review	190			+\$641 If Traffic Study Required
	NOT Exempt from CEQA	3,481			+\$641 If Traffic Study Required
<i>Second Unit Permit</i>		2,821			
<i>Setback Adjustment</i>		270			
<i>Specific Plan</i>		14,004		33	
<i>Substantial Conformance</i>	Ordinance 348, Section 18.43	370			
	Specific Plans	1,820			
	Comm & Accessory WECS Permit	440			
<i>Variance</i>	Filed with CUP, COMM WECS, PP	1,059			
	Filed Alone	1,988			
<i>Large Family Day Care Home</i>		2,382			+\$641 If Traffic Study Required
<i>Cert of Land Div Compliance</i>	Fee per Parcel	571			
	With Waiver of Final Parcel Map	272			+Recordation Fee
<i>Land Div Tract Map</i>	Parcel Maps	306			
	Tract Maps	306			

**TABLE 3-18  
DEVELOPMENT FEE SCHEDULE**

Type of Application		Base Fee	Per Lot	Per Acre	Other Fees if Applicable
<i>Multi-Family Tracts</i>	Residential Condos-Sewered	6,928	81	31	+\$641 If Traffic Study Required
	Residential Condos-Unsewered	7,372	81	31	+\$641 If Traffic Study Required
	Revised Map (within 2 years)	6,203	87	24	+\$641 If Traffic Study Required
	Revised Map (After 2 years)	6,222	87	24	+\$641 If Traffic Study Required
<i>Parcel Maps</i>	Commercial/Industrial Sewered	5,843	27	22	+\$641 If Traffic Study Required
	Commercial/Industrial Unsewered	6,264	27	22	+\$641 If Traffic Study Required (\$52 P/Lot if Improvement P/C)
	Residential (with waiver of Final Map)	3,514	109		+\$641 If Traffic Study Required
	Residential (w/o waiver of Final Map)	3,156	113		+\$641 If Traffic Study Required (\$52 P/Lot if Improvement P/C)
	Revised Map (COMM/IND within 2 years)	1,065	80		+\$641 If Traffic Study Required
	Revised Map (Resi-within 2 years)	1,065	91		+\$641 If Traffic Study Required
	Revised Map (COMM/IND after 2 years)	1,146	48		+\$641 If Traffic Study Required
	Revised Map (Resi-after 2 years)	1,157	119		+\$641 If Traffic Study Required
<i>Single Family Tracts</i>	Not in R-2, R-4, or R-6 Zones-Sewered	5,843	105	22	+\$641 If Traffic Study Required
	In R-2, R-4, or R-6 Zones-Sewered	7,815	113	23	+\$641 If Traffic Study Required
	Not in R-2, R-4, or R-6 Zones-Unsewered	6,264	105	22	+\$641 If Traffic Study Required
<i>Single Family Tracts</i>	Revised Map with 2 years	3,702	78	21	+\$641 If Traffic Study Required
	Revised Map Resi-after 2 years	3,721	78	21	+\$641 If Traffic Study Required
<i>Vesting Maps</i>	Statutory condo Tract Maps	8,638	108	88	+\$641 If Traffic Study Required
	Parcel Maps	8,490	163	23	+\$641 If Traffic Study Required
	Single Family Residential Tracts	8,330	159	22	+\$641 If Traffic Study Required

**TABLE 3-18  
DEVELOPMENT FEE SCHEDULE**

Type of Application		Base Fee	Per Lot	Per Acre	Other Fees if Applicable
<i>Appeals</i>	Tracts/Parcel Maps	357			+\$124 If Road Conditions App +\$435 If Fire Conditions App +\$561 If Both Conditions App
	Appeal Extension of Time	100			
<i>Extension of Time</i>	Tract Maps	289			
	Parcel Maps	296			
<i>Lot Line Adjustment</i>		732			
<i>Minor Change</i>	Tracts	736			+\$641 If Traffic Study Required +\$641 If Traffic Study Required
	Parcel Maps	724			
<i>Merger of Contiguous Parcels</i>		605			
<i>Amendment</i>	Condos/Single-Family Resi Tracts	2,266	19	11	+Recordation Fee
<i>Final Map</i>	Parcel maps	2,139	17	10	+Recordation Fee
<i>Expired Recordable Tract Maps</i>	Single-Family Residential Tracts	2,565	21	16	(Maximum \$1250 Per Acre)
	Multi-Family Residential Tracts	2,725		25	
	Final Tract Map	712	6		
	Final Condo Map	709	1	25	
<i>Archival Search for Planning Information</i>		27/hr			(\$6.75 per 1/4 Hour)
<i>Research Fee for Planning Information</i>		45/hr			(\$11.25 per 1/4 Hour)
<i>Rules to Implement CEQA</i>	Application for Grading Permit	642		5	Maximum \$2179
	App Commercial WECS Permit	454		5	+ \$300 Per MW (Max \$1997 Acre)
	App for Tree Removal	224			
	All Other Applications	613		5	Maximum \$2061
<i>Environmental Impact Report</i>	Sponsored Prepared	7,274			
	Previously Prepared	1,679			
	Appeal to Planning Commission	100			
	Appeal to Board of Supervisors	124			
<i>Geology CEQA</i>	Fault Hazard Report	557			+\$20 Ea Acre Over 10 (Max \$792) +\$395 If Submitted to State
	Review				
	Geologic Waiver	131			
	Liquefaction Report	377			



**TABLE 3-18  
DEVELOPMENT FEE SCHEDULE**

Type of Application	Base Fee	Per Lot	Per Acre	Other Fees if Applicable
<i>Development Agreements</i>	5,000			
Source: City of Calimesa, Planning Department Fee Schedule, Rev., December 4, 1992				

In addition to planning application fees, residential development involves the payment of other City fees. These include building permit fees, plan check fees, Quimby fees, sewer and other utility connection fees, and development impact fees which increase housing construction costs. These costs increase housing prices in the City and may make affordable housing projects economically infeasible.

The City's development fees reflect the costs associated with the processing of permits. The City shall evaluate ways to reduce these costs by increasing efficiency in the review and approval of development proposals. The 9-month processing period from initial application to building permit is not considered lengthy and is not expected to add considerable costs to development. The City will review its Zoning Ordinance after adoption of the General Plan to achieve consistency in land use regulations.

Fees for adjacent cities are provided in Table 3-19. Comparison with neighboring cities and Riverside County shows that fees in Calimesa are on average higher than the neighboring cities of Banning and Beaumont, but are less than those of Yucaipa and Riverside County. Higher development fees may be a contributing factor to higher housing and rent costs in the City.

**TABLE 3-19  
DEVELOPMENT FEES**

Type of Application	Banning	Beaumont	Redlands	Yucaipa	Riverside County
Zone Change/ Reclassification	\$ 950	\$ 1,500 (no fee if General Plan Amendment)	\$ 2,180 + \$ 20 per acre	Minor: \$ 4,000 dep. Major: \$ 5,000 dep.	\$ 4,130
Variance	\$ 400	\$ 500	\$ 600 -Individual; \$1,540 Non-Individual	Minor Variance: \$ 350; Major Variance: \$ 2,000	\$ 1383 if filed with CUP, PP; \$ 2,426 if filed alone

**TABLE 3-19  
DEVELOPMENT FEES**

Type of Application	Banning	Beaumont	Redlands	Yucaipa	Riverside County
Conditional Use Permit	\$660 (non-res.); \$ 660 + \$6.50/res. unit	\$ 750	\$ 3,825 + \$ 55/acre for 1-50 acres; \$ 3,825 + \$ 45 for 51-100 acres; \$ 3,825 + \$ 25/acre for + 101 acres	\$ 3,400	\$ 7,365 + \$ 5/lot
Site Plan Review	\$200 dep. + \$35/hr./person	\$ 150 (no charge for 1st meeting)	\$ 300	Tentative Parcel Map, 4 or less parcels: \$ 3,000; 5+ parcels: \$ 4,000	\$ 711 + \$ 6/acre; Plot Plan \$ 4,317
Rehearing or Appeal	\$ 185	\$ 100 of Staff action to Planning Commission; \$ 175 of Planning Commission to Council	\$ 910	\$ 350	\$ 415
Subdivision/Tentative Tract	\$ 650 + \$15 per lot; \$ 1,100 + \$15 per lot	\$ 1,500 + \$20 per lot	\$ 2,100, minor sub. appl.; \$ 4,000 + \$106/lot (5+ lots)	\$ 5,000 (5 or more parcels)	\$ 4,203

Source: City of Banning Planning Department, City of Beaumont Community Development Department, Redlands Community Development Department, Yucaipa Planning Department, Riverside County Planning Department, January 1993.

**Processing and Permit Procedures.** After the Planning Department deems the application complete, it has 30 days to review the project for compliance with city codes. Permit processing by the City staff includes the initiation of the necessary environmental review process, preparation of analysis of recommendations regarding the project with regards to its compliance with city regulations; suggested conditions or changes to the project and the benefit and disadvantages that may be derived with completion of the projects. The application is then scheduled to go before the Planning Commission at the next monthly meeting.

All residential projects in the City are reviewed by the Planning Commission and the City Council. During the Planning Commission meeting, the Commission conducts the development plan review process (including design review); reviews the development in terms of the staff report and environmental assessment; and approves, denies or approves the project with conditions. If a zone change or general plan amendment (after adoption of the General Plan) is required, the Planning Commission recommends action to the City Council. After the recommendation of the Commission, the project is scheduled to go before the City Council, which meets twice a month. This occurs within the next 30 to 45 days of application processing. The Council approves, denies or approves the project with conditions at its scheduled meeting. Thus, it takes 2 to 3 months for development approval from the time of application submission.

After approval by the City Council, the project goes through the plan check process. Plan check and final building permit approval takes approximately 6 months. Subdivision permits, sewer permits, occupancy permits, and other city approvals add 2 to 3 months to the total time frame of project construction. This time period does not unnecessarily delay project construction nor add pre-construction costs.

Permit processing fees are paid at the time of application with the Planning Department and during the plan check process and building permit approval. Permits and lengthy processing times may discourage construction by increasing the time and costs associated with gaining permit approval. These costs to the developer are often passed on to the renter or homebuyer. The short processing time for projects in Calimesa are not expected to cause unnecessary delays or costs to housing projects.

### **Economic Constraints**

Economic constraints to housing production include the availability of financing loans, land prices and the cost of construction. Energy costs and conservation is discussed as an issue that affects housing design and maintenance costs.

**Financing.** Interest rates for loans are dependent on the national economy. Low rates at this time make housing purchase attractive to prospective homebuyers and decrease monthly mortgages, because increased rates create differences in the monthly mortgage payment by as much as a few hundred dollars for each interest point. While low interest rates may mean that more households can afford to buy a home, lending requirements have become more strict, so that fewer households can actually qualify to purchase a home.

Information from the local banking institution shows that the interest rate for home mortgages is currently set at 5.25 percent to 11.625 percent for a 10-year variable loan and 7.125 percent for a fixed 15-year loan and 7.75 percent for a fixed 30-year loan. These rates increase by approximately 0.5 to 1.0 percent if no points are paid upfront.

Construction loan rates affect the market rents for multi-family projects and the cost of construction. The approval of loans has generally been based on the economic feasibility of a project and the stability of the development company. Construction loans affect the final cost of housing, as



developers often pass on costs to homebuyers or tenants to meet loan payments. Construction loans currently average 8.375 percent to 9.25 percent. There is a slowdown in construction activities at this time, due to the recession and not because of unavailability of financing or high interest rates.

Construction loans and mortgage loans are often critical factors in the development of affordable housing. While most private lending institutions provide this service, government entities have taken active roles in providing financing programs for residential development. Federal, state and local agencies offer a variety of programs which provide funds for housing construction and mortgage loans. The presence of low income families in the City makes resident households and housing units eligible for many of the programs offered by federal and state agencies. The funding limits for these programs should be a consideration for project feasibility.

**Price of Land.** Land costs make up 10 to 30 percent of housing costs. Land in some areas costs more than others due to available services, neighborhood quality, distance to business and commercial centers and other factors.

Information from the Construction Industry Research Board shows that residential land sales in the City range from \$6 to \$10 per square foot, depending on its zoning designation and availability of infrastructure. Thus, a 5,000 square foot lot would cost from \$30,000 to \$50,000 on average.

**Construction Costs.** Construction costs affect housing development. Rising energy and labor costs drive construction costs and lead to more expensive housing prices and rents. Construction costs vary according to the type of development. Multi-family housing is generally less expensive to construct than single family housing units. Housing construction costs include the materials and labor necessary to build the residential unit. These costs will vary widely depending on the quality features, (e.g. size, roofing, carpeting, etc.) which are incorporated into the structure. Information from a local realtor on housing construction costs in Calimesa show that the average construction costs range from approximately \$70 to \$110 per square foot.

Assuming a 1,700 square-foot, three bedroom single family home, with 2 bathrooms, 2-car garage, tile roof, stucco exterior, wood trim, and modest fencing, the average housing cost is between \$148,000 and \$165,000. Custom single family homes, in excess of 2,500 square feet, with amenities such as detailed fencing, swimming pools, and expensive flooring average \$275,000. Condominium construction costs average \$120,000, assuming a 1,200 square foot, 2-bedroom unit with swimming pool privileges.

**Infrastructure.** Infrastructure systems are in place only in the developed areas of the City. Water and sewer lines have not been laid out in vacant areas (Exhibit 3-2 shows these vacant areas). Development in these areas will require the extension of existing water and sewer lines. Since domestic water in the areas comes solely from water wells, new development will mean an increase in the pumping of groundwater resources. Reclaimed water from the sewer treatment plant augments water use in the area. Also, the Yucaipa Valley Water District has joined the San Bernardino Valley Municipal Water District, one of the area-wide water agencies negotiating to obtain imported water from the State Water Project. Sewer capacity at the plant is at 4 million gallons per day (mgd), with

the plant currently processing 2.5 mgd. There is a remaining 1.5 mgd capacity to accommodate sewage generated from future development. Sewage generation from additional development beyond the remaining capacity will require the expansion of plant capacity or a new treatment plant.

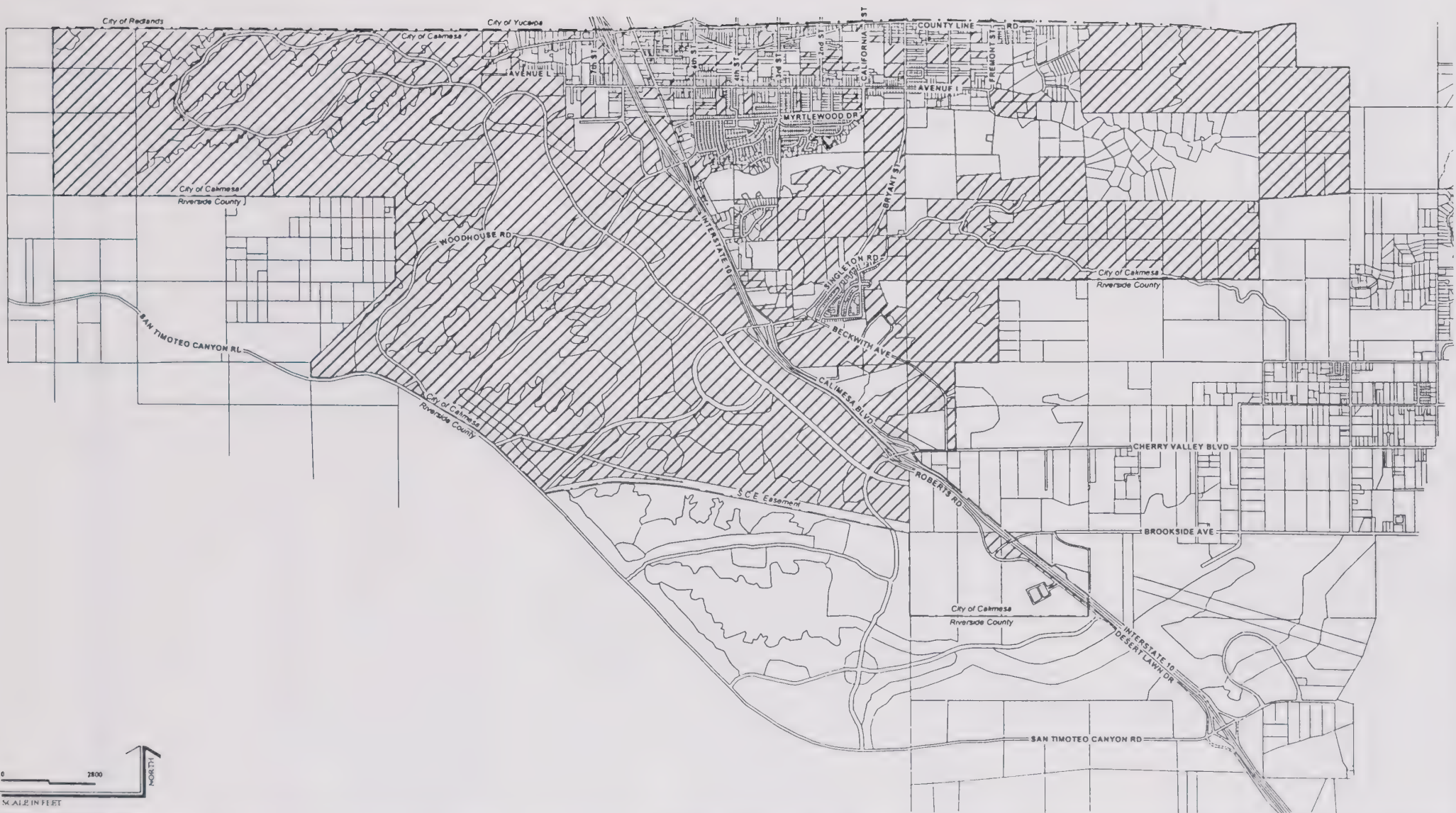
Development on existing undeveloped land in outlying areas would require the provision of infrastructure and services which do not currently exist. The need for additional water lines, sewer lines, streets, telephone lines and other infrastructure will add to development costs which would render housing units unaffordable to lower income households. While these areas may be served by private wells and septic tanks, it is in the public interest to provide connections to the water and sewer systems serving the City.

**Local Geology.** The rolling terrain on Calimesa Hills and the Oak Valley area present constraints to development. Portions of these areas present landslide hazards, fire hazards, very steep slopes, and other geologic, flood, and seismic hazards that would require special engineering design in order to reduce and prevent risks to future residents. These constraints limit the density of housing in these areas and add to housing costs.

**Land Availability.** There are large undeveloped areas in Calimesa which could accommodate future residential development. Approximately 6,913 acres of land remain vacant in the outlying areas of the City (see Exhibit 3-2). Table 3-20 provides a breakdown of vacant land by zoning category. Approximately 15,381 dwelling units can be built on these areas.

TABLE 3-20 VACANT RESIDENTIAL LAND			
Zone	Acres	Density	Housing Capacity
A-1	207.78	1 du/ac	208 du
A-1-2	4.58	1 du/2 ac	2 du
A-1-5	343.97	1 du/5 ac	69 du
RA	962.29	2 du/ac	1,927 du
R-1	279.74	4 du/ac	1,119 du
R-2	28.97	17 du/ac	492 du
R-2-4000	3.42	11 du/ac	38 du
R-3	2.42	20 du/ac	48 du
R-T	30.29	17 du/ac	515 du
W-2	1,051.08	2 du/ac	2,102 du









**TABLE 3-20**  
**VACANT RESIDENTIAL LAND**

Zone	Acres	Density	Housing Capacity
<b>Oak Valley Specific Plan</b>			
Very High	73	14-20 du/ac	1,095
High Density	179	8-14 du/ac	1,749
Medium High	511	5-8 du/ac	3,280
Medium Density	658	2-5 du/ac	2,323
Low Density	404	0.4-2 du/ac	414
Other	<u>2,107.55</u>	--	<u>--</u>
Total	3,932.55		8,861 du

Source: David Evans and Associates, Inc., 1993.

Land in the Oak Valley Specific Plan area is primarily vacant. Buildout of the specific plan is expected to accommodate 8,861 dwelling units, which would include approximately 1,095 high density multi-family units (development under the Residential Very High category).

**Energy Conservation.** Rising energy costs increase the cost of construction and the maintenance of housing units. While construction activities use gas and electricity for the operation of equipment and facilities, these are short-term uses. The occupancy of the housing unit has a greater energy demand for the long-term. Reducing the need for energy will present long term savings on housing expenditure and the conservation of environmental resources. Opportunities for conservation that may be used during construction include energy-efficient equipment and building orientation and landscaping that takes full advantage of climate and site characteristics.

Dwelling units can minimize energy use through the installation of extra insulation, passive solar systems, use of gas instead of electricity, fluorescent lighting and other technologies. This would increase the initial building costs and keep housing beyond the affordability of lower income households.

The Southern California Gas Company offers home weatherization improvements at no cost to low income customers. These energy saving measures include attic insulation, weatherstripping, caulking, water heater insulation blankets, hot water saving showerheads, heating and cooling duct insulation, and limited repairs to make a housing unit energy-efficient. Energy conservation practices may be used by households to reduce their energy bills. They include adjustments in heating demands, laundry and cooking practices and other measures that reduce the use of gas and electricity.

During the course of reviewing proposed residential projects, alternative ways of promoting energy conservation should be considered as part of the approval process.





## SECTION 4: RESOURCE MANAGEMENT

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### INTRODUCTION

The Resource Management Profile Report identifies the environmental resources of the City. It addresses soil resources, groundwater resources, vegetation and wildlife, scenic highways, visual resources, cultural (historical, archaeological, and paleontological) resources, and open space and recreational opportunities. These resources are typically nonrenewable or limited and need to be preserved and managed in order to be available for future generations.

### ENVIRONMENTAL SETTING

The City of Calimesa is located in the eastern portion of Southern California's inland valley. The larger inland valley area is bounded on the north by the San Gabriel and San Bernardino Mountains; the San Jacinto Mountains on the east, the San Jacinto Basin on the south, and the Santa Ana Mountains in the distant west. The valley slopes upward gently to the northeast, towards the surrounding mountains. The Santa Ana River is the main river channel bisecting the inland valley. The river stretches approximately 75 miles and has a total drainage area of 3,200 square miles. Originating in the San Bernardino Mountains, the Santa Ana River traverses San Bernardino, Riverside and Orange Counties before reaching the Pacific Ocean near Newport Beach.

The City of Calimesa is located in northern Riverside County, between the San Gorgonio Pass and Yucaipa Valley. Calimesa's northern boundary line, County Line Road, also forms the boundary between Riverside and San Bernardino counties. The local topography is dominated by a system of mountains and hills sloping towards benches, or mesa-like areas. The North Bench is still known by its geographical location. The Middle Bench encompasses central Yucaipa, and Calimesa occupies the South Bench. Historically, Calimesa was divided from Yucaipa by Wildwood Canyon Wash (north of Avenue H in Yucaipa), although County Line Road now separates the two cities.

Mount San Gorgonio and Mount San Jacinto are two tall, majestic mountains in the inland valley area. They represent the major topographical features on either side of the San Gorgonio Pass. The Crafton Hills and the San Bernardino Mountains are located northwest of Calimesa. The San Jacinto Mountains are located east of the City, and the San Timoteo Badlands, a system of scarcely vegetated ridges and hills are located directly south of the City. The topography of Calimesa is characterized by foothills in the City's eastern area, and a mesa area extending through the central and western portions, gradually sloping towards the San Timoteo Creek in the southwestern portion of the City.

Rivers and streams draining the San Bernardino Mountains flow westward through the canyons, join the Santa Ana River system, and are ultimately discharged into the Pacific Ocean. There are several intermittent streams draining mountainous areas north and northeast of the City and flowing through the canyons of Calimesa.

## SOIL RESOURCES

The East Valley Resource Conservation District has classified soils in Calimesa according to soil limitations and soil suitability. A soil association is a group of soils that have the same profile, arrangement, sequence of layers, or other characteristics. The City of Calimesa is overlain by three soil associations:

- Hanford-Tujunga-Greenfield Association,
- Tollhouse-Sheephead-Crafton Association, and
- Badland-San Timoteo Association.

In general, the Hanford-Tujunga-Greenfield Association, which covers the north central portion of the City has favorable soil properties such as deep, well drained soils and slight limitations for development purposes. The Tollhouse-Sheephead-Crafton Association and the Badland-San Timoteo Association, covering the Calimesa Hills in eastern Calimesa, and the San Timoteo Canyon area in western Calimesa, respectively, have more unfavorable soil properties, such as steep and shallow soils which present constraints to development. Exhibit 4-1 shows the soil associations.

## Mineral Resources

The City of Calimesa does not contain any significant sand, gravel, or rock resources, as identified by the Division of Mines and Geology. Although, Riverside County areas south of Calimesa, and the Cities of Beaumont and Banning east of the City have been classified by the Division of Mines and Geology as Mineral Resource Zone 2, (MRZ-2 - areas containing significant mineral deposits or where there is a high probability of their existence), significant mineral resources do not extend into the City of Calimesa.

## Agricultural land

There are privately owned and operated agricultural lands in Calimesa that are currently used for a chicken ranch, hay farms and orchards. They cover approximately 338.24 acres on the western and southern sections of the City. The Department of Conservation defines Prime Farmland as land which is best suited for producing food, feed, forage, fiber, and oilseed crops. Prime farmland may also include cropland, pastureland, rangeland, and forest land. It is not available for urban development or water resources. Characteristics of Prime Farmland include soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically, when treated and managed according to modern farming methods. In Calimesa, agricultural land close to the southwest boundary is designated as Prime Farmland.

Farmland of Statewide Importance is land not classified as Prime Farmland which has a good combination of physical and chemical properties for producing food, fee, forage, fiber and Unique Farmland is land not classified as Prime or Statewide Important Farmland, which is used for the production of specific high value food and fiber crops. Calimesa does not include statewide Important Farmlands or Unique Farmlands.









The City of Calimesa also includes Locally Important Farmlands and Grazing Lands, which also retain significant economic viability. Locally Important Farmlands include high quality farmlands lacking available irrigation; lands planted between 1980-81 to dry land grain crops; major Riverside County farmland not listed as Unique Farmland crops; dairylands if accompanied with more than 10 or more acres of permanent pasture or hayland; land identified by Riverside County Ordinances as Agricultural Zones or contracts; and lands planted with jojoba which is under cultivation and of producing age. Locally Important Farmlands in Calimesa are located immediately west of Interstate 10. Grazing lands are located in the northwest portion of the City. Exhibit 4-2 identifies Prime and Locally Important Farmlands, and Grazing Lands in Calimesa.

## GROUNDWATER RESOURCES

The Calimesa area is within the watershed of the Santa Ana River and its tributaries, and is defined as the Upper Santa Ana region. This watershed drains the southern portions of the San Bernardino Mountains and the eastern San Gabriel Mountains. Calimesa is underlain by the water bearing San Timoteo formation between the Cherry Valley fault northeast of the City and the San Timoteo Creek southwest of the City. This water bearing formation, referred to as the San Timoteo Subbasin, has been characterized by the United States Geologic Survey and the State Department of Water Resources (DWR) as a slow moving water body flowing in a north to northwesterly direction. The groundwater of the San Timoteo formation is primarily stored in the lenses of sand and gravel which extend to 1,000 feet in some places.

The San Timoteo formation developed in the Upper Pliocene period of the Cenozoic era. The water bearing quality of this formation is not as productive as those of the younger and less bonded alluvial materials in the Pleistocene and Recent periods. The DWR has estimated the amount of water within the San Timoteo Subbasin at one million acre-feet and a perennial ground water yield of 5,800 acre-feet per year.

Groundwater from the San Timoteo Subbasin serves the City's water needs, and wells are operated by the South Mesa Water Company and the Yucaipa Valley Water District within their respective jurisdictions. In 1992, the Yucaipa Valley Water District pumped a maximum of 872 acre-feet of water in July and a minimum of 277 acre-feet in March. The average daily water usage is estimated at 6.26 million gallons.

Several stream courses drain the mountain areas surrounding Calimesa, and pass through the City into the San Timoteo Creek. The Garden Air Wash runs through the Calimesa Golf and Country Club, continuing further southwest. The Calimesa Channel is a concrete-lined water course which weaves through north central Calimesa and becomes Calimesa Creek, an unrestricted stream course west of Interstate 10. In addition, there are several intermittent stream courses passing through Calimesa south of the Garden Air Wash.

## Water Quality

Water quality is a measurement of dissolved mineral content. The water quality of the Upper Santa Ana region is a reflection of local topography, subsurface geology, land use, well pumping, and urbanization forces. Water quality is highest within mountain streams. Where the streams leave the mountain bases, they are largely influenced by the original agricultural water management practices of the Calimesa area. These practices are evidenced by streams diverted for domestic use, irrigation purposes, percolation, and recharge of groundwater basins.

Groundwater quality is influenced through the percolation of domestic and industrial chemicals, and by reducing the groundwater volume through evaporation or evapotranspiration. In addition, the use of reclaimed water for domestic or industrial purposes increases the mineral content before it is discharged.

The County of Riverside, including the City of Calimesa, is located within the Santa Ana River Basin. The Regional Water Quality Control Board for the Santa Ana River Region developed a Water Quality Control Plan for the Santa Ana River Basin in 1984 (referred to as the Basin Plan). The Basin Plan for the San Timoteo Subbasin designates municipal and domestic, agricultural, industrial service, and industrial process supplies as beneficial groundwater uses. The Basin Plan also defines water quality objectives for the San Timoteo Subbasin. Water quality samplings from Yucaipa Valley Water District wells indicate that some of the concentrations for total dissolved solids, sodium, chloride, and nitrate have exceeded the water quality objectives established in the Basin Plan for the San Timoteo Subbasin.

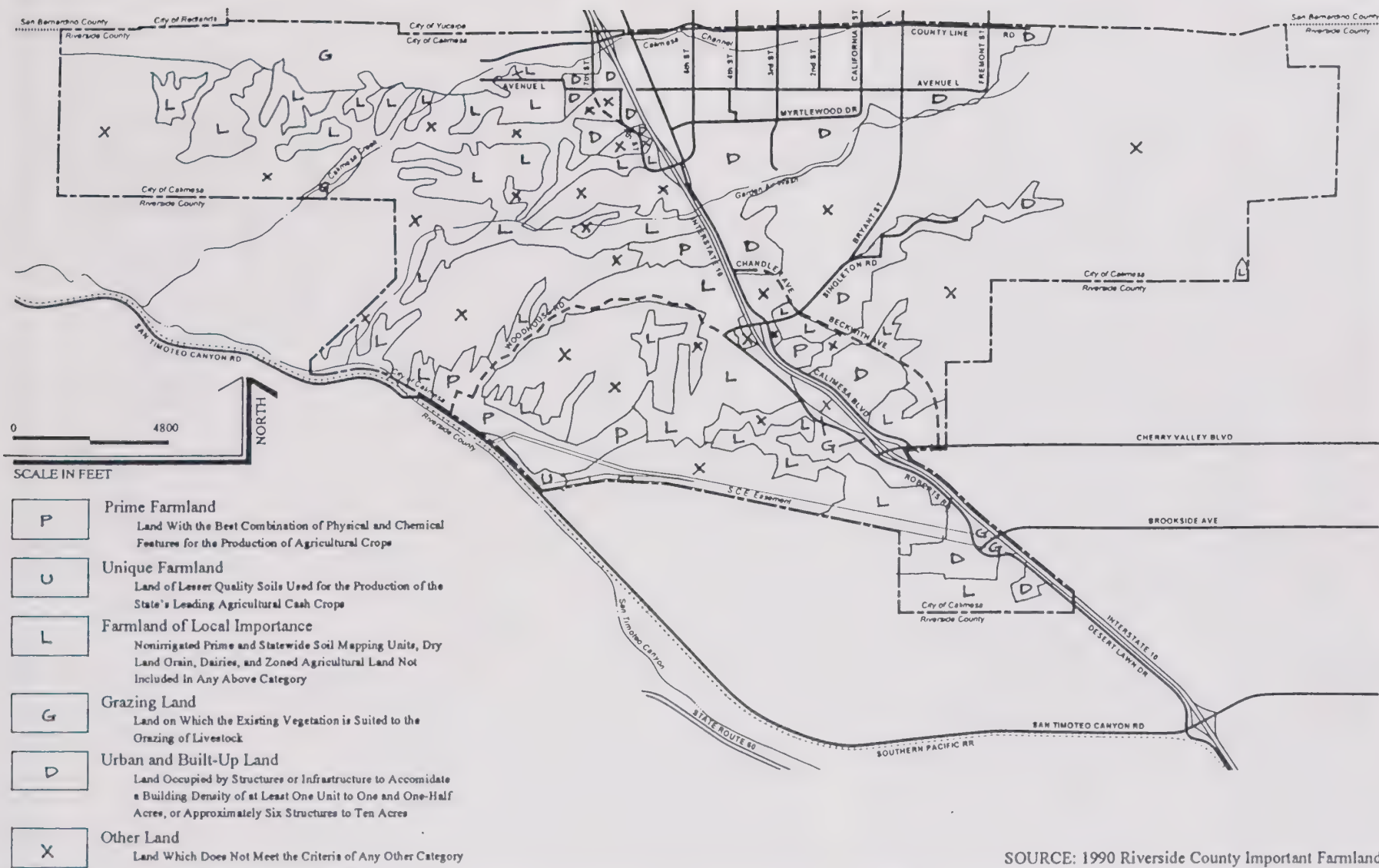
## VEGETATION AND WILDLIFE

### Vegetation Types

A mosaic of diverse vegetation types, that is generally well correlated with underlying soil types and local topography, occurs in the City of Calimesa. On a broad distributional scale, the City of Calimesa lies in a transitional zone between Riversidean Coastal Sage Scrub and Chaparral vegetation as mapped by Kuchler (1977). This defines the potential vegetation in the City, given climatic, soil, and topographic influences. The City is located at the northern limits of Riversidean Coastal Sage Scrub vegetation where influences of the San Bernardino Mountains provide local conditions which are progressively more favorable for Chaparral vegetation. Kuchler's map places the Calimesa area within Riversidean Coastal Sage Scrub that is surrounded to the north and south by massive areas of Chaparral. For this reason, the scrub vegetation within the City forms a mosaic or reticulum of mixed Riversidean Coastal Sage Scrub/Chaparral Vegetation that cannot be mapped separately at a large scale. Only in the northeastern portions of Calimesa does Chaparral vegetation express itself traditionally. Even this area contains Mixed Chaparral, locally supporting many different dominant species.

Minnich (1990) mapped the vegetation of western Riverside County, including the vegetation within Calimesa, south of Interstate 10, as part of the Habitat Conservation Plan for the Stephens' Kangaroo





SOURCE: 1990 Riverside County Important Farmland Map



Rat. Minnich's map labels three large areas in the City of Calimesa (south of Interstate 10) as Chamise Chaparral and one area as Coastal Sage Scrub. These same areas were more finely mapped by Dames and Moore (Oak Valley Specific Plan 1988) as a mixture of "Inland Sage Shrub/Chaparral." The differences apparently are due to differences in interpretations of aerial photographs, at the scale at which the mapping was conducted, and in the amount time spent field checking the map interpretations within the Calimesa area.

On a smaller scale, the scrub vegetation within Calimesa falls into three basic categories, generally controlled by topography and slope aspect. North-facing slopes, which are less exposed to drying effects of the sun, support more mesic (moderately wet loving) plants generally associated with Chaparral vegetation. South-facing slopes, more exposed to the drying effects of the sun, tend to support xeric (dry loving) plants, generally associated with Riversidean Coastal Sage Scrub vegetation. A mixture of these plants occur within transitional situations, with coastal sage scrub in most of the hilly areas of Calimesa. Riversidean Coastal Sage Scrub and Chaparral vegetation intergrade and interdigitate throughout these areas, with more moist slopes and ridges supporting more broad-leaved plants. The vegetation in the northeastern areas of Calimesa makes a transition into Mixed Chaparral, containing small patches of Riversidean Coastal Sage Scrub on south and west-facing slopes.

The vegetation in the City consists of both wetland and upland types, as listed in Table 4-1, and shown on Exhibit 4-3. These include:

■ **Wetland Vegetations**

Riparian

- Riparian Woodland
- Riparian Thicket
- Riparian Scrub
- Dry Wash
- Aquatic Bed

Other Wetlands

- Wet Meadow
- Pond
- Freshwater Marsh

■ **Upland Vegetations**

- Annual Grassland
- Meadow
- Oak Woodland and Savanna
- Riversidean Sage Scrub (Mixed with Chaparral in Calimesa)
- Riversidean Alluvial Fan Sage Scrub
- Mixed Chaparral



- **Croplands**
- **Developed Areas**

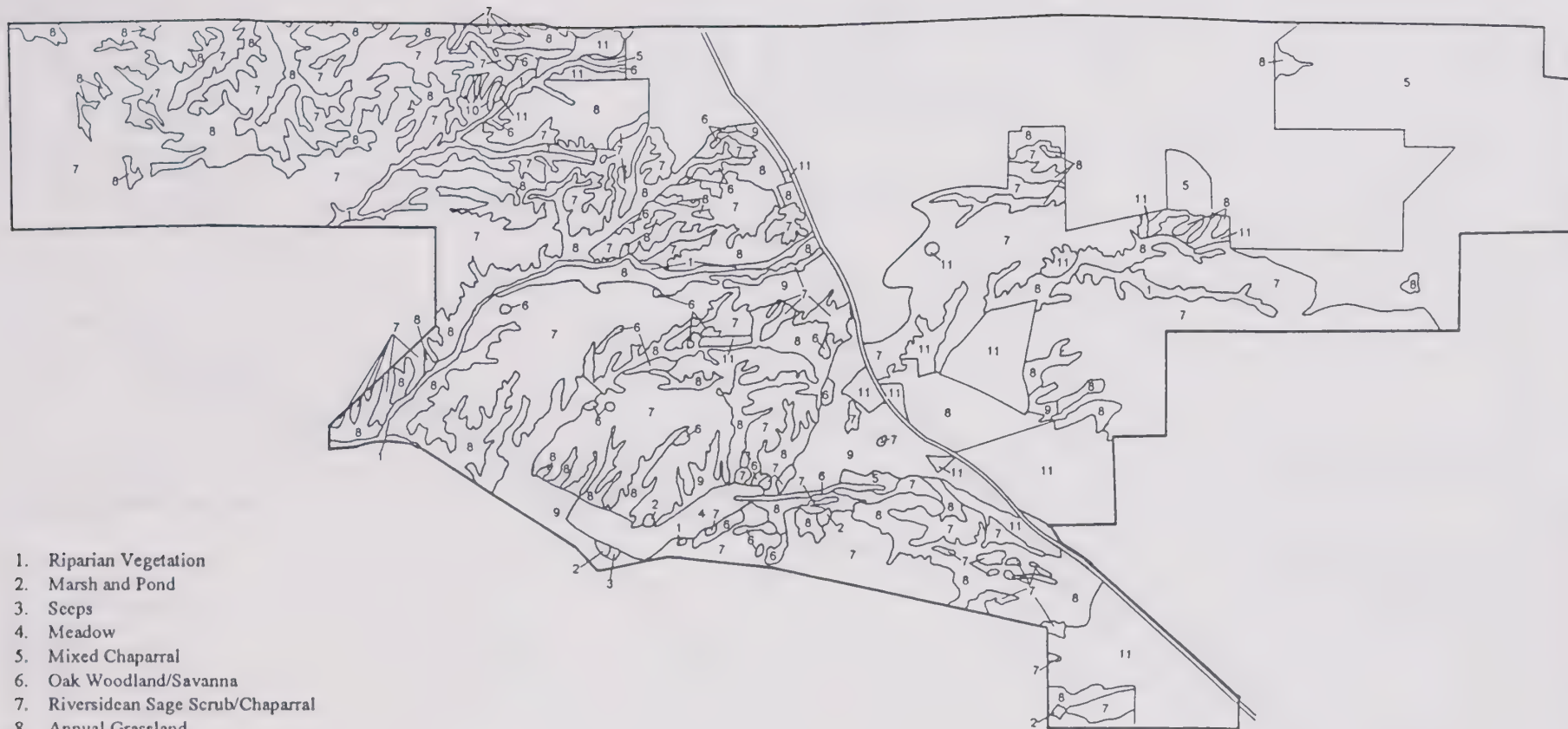
The biological diversity of the area is relatively high due to the occurrence of diverse plant communities, habitats, and soil characteristics. Desert influence is evident from the presence of the California Juniper (*Juniperus californica*) and the desert brittle bush (*Encelia farinosa*) in the Riversidean Sage Scrub. The upper elevations on the hillside areas are not high enough to support many of the montane elements of the San Jacinto Peak region (Bryant 1982).

**TABLE 4-1**  
**BIOLOGICAL COMMUNITIES IN CALIMESA**

Biological Community	Approximate Acreage
1. Riparian Vegetation	135.9
2. Marsh and Pond	8.2
3. Seeps	>10.0*
4. Meadow	82.0
5. Mixed Chaparral	849.6
6. Oak Woodland/Savanna	52.9
7. Riversidean Sage Scrub/Chaparral Mix	3186.2
8. Annual Grassland	1688.2
9. Cropland	439.4
10. Introduced Trees	10.2
11. Developed Areas	237.7
*Seeps are present throughout Calimesa, but are not quantified for the area northeast of Interstate 10.	

The following section discusses vegetation types found in the City of Calimesa, largely based upon the work performed by Dames and Moore and Michael Brandman Associates (1988) for the Oak Valley Specific Plan, which covered the area southwest of Interstate 10. The biological resources northeast of the Interstate 10 were surveyed by BioDiversity Associates in December 1992. Exhibit 4-4 indicates aquatic resources in the area that are of:

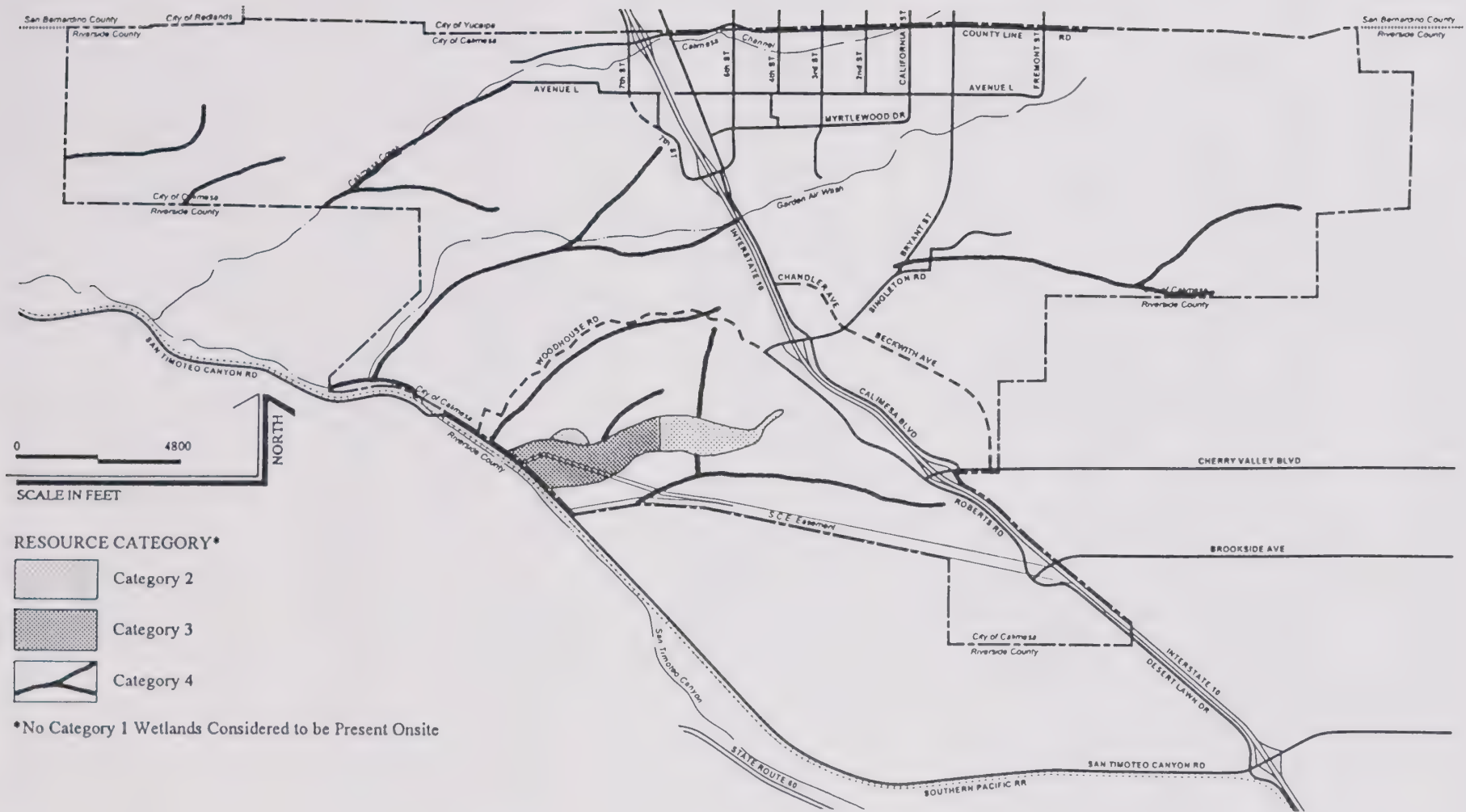
- high habitat value for important species and are unique or irreplaceable,
- high habitat value and are scarce or becoming scarce,
- high to medium habitat value and are abundant, and
- medium to low habitat value



1. Riparian Vegetation
2. Marsh and Pond
3. Sccps
4. Meadow
5. Mixed Chaparral
6. Oak Woodland/Savanna
7. Riversidean Sage Scrub/Chaparral
8. Annual Grassland
9. Cropland
10. Introduced Trees
11. Inheld Developed Areas









These are based on USFWS resource designation criteria.

### **Riparian Woodland Vegetation**

Riparian Woodland vegetation is found intermittently along San Timoteo, Singleton, and Burns Canyons, and in clumps in other minor drainage areas throughout Calimesa. It consists of medium to large-sized broad-leaved deciduous trees. These canyons vary in physical characteristics, but in places consist of broad or deep gullies with sandy bottoms that support clumps or scattered Fremont Cottonwoods (*Populus fremontii*), Box Elders (*Acer negunda*), Western Sycamore (*Platanus racemosa*), Black Willow (*Salix gooddingii*), and Arroyo Willow (*Salix lasiolepis*). Climbing vines of Wild Grape (*Vitis girdiana*) dominate many trees and shrubs in the area where there is semi-permanent water, such as in Singleton and San Timoteo Canyons. Stream side herbaceous growth is typical of Southern California cismontane streams, including species such as *Baccharis sergiloides*, *Scirpus americanus*, *Rosa californica*, *Artemisia douglasiana*, *Juncus mexicanus*, and *Juncus dubius*. This woodland vegetation is a very productive environment and adds substantial diversity to the area's vegetation character.

### **Riparian Thicket Vegetation**

Riparian Thicket vegetation is found generally adjacent to Riparian Woodland on more mesic (moderately wet) sites and adjacent to Riparian Scrub on more xeric (dry) sites. Typically, species of the riparian thickets include Virgin's Bower (*Clematis lasiantha*), California Blackberry (*Rubus ursinus*), Narrowleaf Willow (*Salix exigua*), Arroyo Willow (*Salix lasiolepis*), Giant Creek Nettle (*Urtica dioica*), and Wild Grape (*Vitis girdiana*). These plants occur primarily in Singleton and San Timoteo Canyons.

### **Riparian Scrub Vegetation**

Riparian Scrub vegetation consists of scattered broad-leaved evergreen shrubs and perennial herbs that occupy drier sites within stream courses than Riparian Woodland and Riparian Thicket vegetation. Common plants in this vegetation include Tarragon (*Artemisia dracunculus*), Cudweed-aster (*Corethrogyne filaginifolia*), Scale Broom (*Lepidospartum squamatum*), Tree Tobacco (*Nicotiana glauca*), and, occasionally, the exotic Giant Reed (*Arundo donax*). Riparian Scrub is found within most of the length of Burns and Covington Canyons, and in the upper portions of San Timoteo Canyon. It occurs in many of the smaller ephemeral and intermittent stream courses throughout the City of Calimesa and is frequently mixed with Riparian Thicket and Woodland vegetation.



### **Dry Wash Vegetation**

This vegetation is generally low and open, consisting mostly of spring and summer annual herbs in dry stream channels that are disturbed by flooding in winter and spring and by severe moisture stress in the summer. Typical plants in this vegetation include Western Ragweed (*Ambrosia psilostachya*), Willow Herb (*Epilobium paniculatum*), Pineapple Weed (*Matricaria matricarioides*), Bur Clover (*Medicago polymorpha*), Sweetclover (*Melilotus* species (sp.)), Spiny Clotbur (*Xanthium spinosum*), and Cockelbur (*Xanthium strumarium*). Such vegetation is found throughout the area in most canyons, but is particularly developed in Covington Canyon, and moderately developed in the upper Singleton, San Timoteo, and Burns Canyons.

### **Aquatic Bed Vegetation**

This vegetation consists of rooted and free-floating annual and perennial vascular plants and green algae, where perennial or semi-perennial streams flow. Typical plants include Spearmint (*Mentha spicata*), Water-cress (*Nasturtium officinale*), and Green Algae (*Nitella* sp.) Portions of Singleton and San Timoteo Canyons support this vegetation.

### **Wet Meadow Vegetation**

Wet Meadow vegetation contains low tufted or mat-forming perennial herbs on saturated soils, often with shallow surface water. This vegetation intergrades with meadow and annual grassland on xeric sites, and freshwater marsh and riparian vegetation on more mesic sites. Characteristic plants include Yerba Manza (*Anemopsis californica*), Celery (*Apium graveolens*), sedges (*Carex* sp.), and Iris-leafed Rush (*Juncus xiphioides*). It occurs in several location in Singleton Canyon near the base of hillsides (in seep areas), and may occur in small, localized sites throughout the City where seeps occur.

### **Pond Vegetation**

Pond vegetation consists of submerged, rooted aquatic plants and algae. It occurs in several natural and man-made ponds scattered throughout the Calimesa area. Typical species include Hornwort (*Ceratophyllum demersum*), Fennel Pondweed (*Potamogeton pectinatus*), and Green Algae (*Nitella* sp., *Chara* sp., and *Tolypella* sp.). Ponds located in Singleton Canyons, San Timoteo Canyon, Garden Air Wash, and other places in the City were established for cattle and for landscape features, such as in golf courses, and their water levels are artificially maintained.

### **Freshwater Marsh Vegetation**

Freshwater Marsh vegetation consists of rhizotomous perennial emergent monocot herbs that attain a height of approximately six feet, in ponds underlain by saturated clay loam soils. This vegetation intergrades with wet meadow vegetation surrounding ponds. Typical species include Umbrella Sedge (*Cyperus* sp.), Three-square (*Scirpus americanus*), and Broadleaf Cattail (*Typha latifolia*). Many

ponds in the area, such as those in Singleton Canyon, that were once used for watering cattle have not been maintained in recent years.

### **Annual Grassland Vegetation**

Annual Grassland vegetation consists of short, spring-flowering annual grasses and herbs, usually on well developed soils. Typically, this vegetation occupies level and gentle slopes where erosion is very localized. Within the planning area, grasslands are dominated by naturalized annual European grasses that have displaced native species. Dominant species within the area include Slender Wild Oat (*Avena barbata*), Brome Grass (*Bromus* sp.), Foxtail Barley (*Hordium leporinum*), Goldentop (*Lamarkia aurea*), Abu Mashī (*Schismus barbatus*), and Slender Fescue (*Vulpia bromoides*). Numerous naturalized annual wildflower herbs are also present. These include Fiddleneck (*Amsinckia menziesii*), mustards (*Brassica* sp.), sun cups (*Camissonia* sp.), filarees (*Erodium* sp.), lupines (*Lupinus* sp.), and butterweeds (*Senecio* sp.). Annual grasslands occur throughout the area on mesa tops, flats, saddles, and canyon floors. Almost every major drainage area and many of their tributaries, where alluvial soils persist, support this vegetation. Most grasslands within the City have been heavily grazed by cattle, sheep, and horses in the past. This vegetation forms the understory of Riversidean Sage Scrub, where the scrub occupies open areas between patches of shrubs. It also forms the understory of oak woodland and oak savannas. Annual grassland also intergrades and intersperses with Meadow, Riversidean Sage Scrub, and Chaparral vegetation throughout the planning area, frequently forming the understory of these associations.

### **Meadow Vegetation**

Meadow vegetation in the Calimesa area consists of moist grasslands, dominated by Streambank Wheatgrass (*Agropyron riparium* - a perennial bunchgrass that forms a transitional zone between wet meadow vegetation and annual grassland). Other species in this vegetation include Bull Thistle (*Cirsium vulgare*), Salt Heliotrope (*Heliotropum curassavicum*), Italian Ryegrass (*Lolium multiflorum*), and Common Vetch (*Vicia angustifolia*). Meadow vegetation occurs within the area within the lower portions of Singleton Canyon.

### **Oak Woodland Vegetation and Savanna**

Oak Woodland vegetation consists of broad-leaved evergreen trees that reach up to 40 feet in height. This vegetation is accompanied by an understory consisting of Annual Grassland, Riversidean Sage Scrub, or Chaparral. Oak Woodland vegetation develops a Savanna phase where grassland understories predominate; and a Woodland phase where the trees exhibit a closed, often continuous, canopy. This vegetation occurs on well-developed soils, generally on north-facing slopes and flat areas at the base of slopes where moisture availability is slightly higher than in areas supporting Annual Grassland, Riversidean Sage Scrub, or Chaparral. Dominant tree species are the Coast Live Oak (*Quercus agrifolia*) and the MacDonald Oak (*Quercus macdonaldii*). Oak Woodland and Savanna occupy portions of Singleton, Woodhouse, Burns, and Covington Canyons, and along Garden Air Wash, and in numerous unnamed side canyons throughout the City. The deeper portions



of these canyons are, like Live Oak Canyon west of Calimesa, support relict oak woodlands that are remnants of pluvial (wet) climates of the early Holocene period (Bixler 1992). The bottom areas of these canyons contain riparian systems that are hydric (moist) on the north and west banks, with dense willow thickets; and more xeric (dry) on the south and east banks.

### **Riversidean Sage Scrub Vegetation**

This vegetation is also known as Inland Sage Scrub (Axelrod 1978), Riversidean Sage Scrub, or Coastal Sage Scrub. It occurs mostly on xeric (dry) south-facing slopes, where it frequently blends with Chaparral, especially on low ridgetops and on west-facing slopes. This transitional phase is most prevalent on the hills between Interstate 10 and Garden Air Wash and in the vicinity of Singleton and Woodhouse Canyons, although pure stands of Riversidean Sage Scrub are relatively small in areal extent anywhere within the City. Where it does exist, shrubby elements consist of low, open vegetation including: Flat-top Buckwheat (*Eriogonum fasciculatum*), Desert Brittle Bush (*Encelia farinosa*), California Sagebrush (*Artemisia californica*), Cotton-thorn (*Tetradymia comosa*), Valley Cholla (*Opuntia parryi* sp. *parryi*), Beaver-tail Cactus (*Opuntia basilaris*), and Our Lord's Candle (*Yucca whipplei*).

Past fires have burned areas of this vegetation, which has encouraged the invasion into the plant community of non-native grasses and forbs. Sheep grazing also has occurred, especially in open areas of Sage Scrub habitat where there are more suitable grasses and forbs. Such areas typically are populated with post-fire successional wildflowers, such as *Phacelia*, *Amsinckia* and *Cryptantha* in the spring.

### **Riversidean Alluvial Fan Sage Scrub Vegetation**

This vegetation consists of evergreen and drought-deciduous shrubs and sub-shrubs, stem succulents, and herbaceous annuals and perennials that are restricted to gently sloping alluvial fans and flood plains. Such areas develop erosional substrates of well-drained stream deposits containing sand and gravel, but little organic matter except that found in silty deposits. Clay lenses interspersed within the alluvium hold and supply underground moisture following rainy periods. Typical plants in this vegetation include Scale Broom (*Lepidospartum squamatum*), California Buckwheat (*Eriogonum fasciculatum*), Matchweed (*Gutierrezia bracteata*), and California Croton (*Croton californicus*). Within Calimesa, the expression of this vegetation is the pioneer stage of Alluvial Scrub Vegetation that develops along the base of the San Gabriel, San Bernardino, and San Jacinto Mountains (where high-flow storm runoff creates a series of progressively higher terraces downstream of alluvial fans). The Calimesa area does not appear to support the conditions for development of true Alluvial Scrub vegetation as described in Hanes, Friesen, and Keane (1988). The CNDDDB (1993) identifies this vegetation in the Santa Ana Wash and Mill Creek north of Redlands, and in Wilson Creek north of Yucaipa.



## Mixed Chaparral

Mixed Chaparral vegetation (frequently mixed with Riversidean Sage Scrub vegetation) is the predominant biological community in the area. Within Calimesa (where it reaches its lowest elevations) this vegetation frequently cannot be mapped at a large scale separately from Riversidean Coastal Sage Scrub with which it is very frequently interspersed. The northeastern portion of the City, however, develops Mixed Chaparral at high elevations. The composition of this Chaparral varies locally according to elevation, exposure, slope, soil type, fire history, and grazing history. In shallower soils, the Chaparral is composed mainly of Chamise (*Adenostoma fasciculatum*). In the northeastern portion of the area, the vegetation is more mixed with species such as *Ceanothus* sp., *Salvia mellifera*, and *Adenostoma fasciculatum*. On north-facing slopes, the diversity of the Chaparral increases with the addition of many more broad-leaved taxa. Where elevations reach 3,000 feet above mean sea level (msl), plants such as *Arctostaphylos* form major areas of cover. This vegetation, especially abundant on north-facing slopes in the planning area, is characterized by such species as Chamise (*Adenostoma fasciculatum*), Black Sage (*Salvia mellifera*), Wild-lilac (*Ceanothus* sp.), Mountain Mahogany (*Cercocarpus betuloides*), Scrub Oak (*Quercus dumosa*), Sugarbush (*Rhus ovata*), Bush Penstemon (*Keckiella antirrhinoides* sp. *microphylla*), Big-berry Manzanita (*Arctostaphylos glauca*), Holly-leaf Cherry (*Prunus ilicifolia*), Toyon (*Heteromeles arbutifolia*), Winter Currant (*Ribes indecorum*), and Tree Poppy (*Dendromecon rigida*), among others. This vegetation, more than any other within the area, is highly dependent upon occasional fires to retain its biological vigor.

## Wildlife Habitats

The City of Calimesa is located between the San Bernardino Mountains and the San Jacinto Valley, both of which are important centers of biological diversity. Additionally, the City lies in the pathway between the desert and coastal migration routes of numerous bird and bat species that may forage or rest (sometimes for extended periods) during their movements between winter and summer grounds. Individuals of some bird species that normally are migratory, may be taking up permanent residency within Calimesa.

A variety of wildlife habitats and habitat features exist within the Calimesa area, including both primary habitat types that are usually defined by vegetation types, and secondary habitats that occur within larger major habitats. Although secondary habitats may be smaller in size or more restricted in distribution, they are of equal importance to primary habitats. Isolated trees, for example, in many cases may support a particular species, such as a nesting raptor, within a primary habitat area. The elimination of the isolated tree would eliminate the wildlife species from that primary habitat.

Wildlife utilize almost every feature of the Calimesa area and the diversity of wildlife is generally directly correlated with the diversity of vegetation, both in regard to the floral diversity and physical structure of plants in the area. Areas where two or more habitat types come together (ecotones) are especially important. Ecotones support more species than the individual habitats. Within Calimesa, special wildlife values will be found where various habitats and vegetations come together. The City

of Calimesa is located within a major transitional zone between Coastal Sage Scrub vegetation with Chaparral vegetation. It also lies at the northernmost edge of the distribution of Coastal Sage Scrub vegetation in southern California.

### **Chaparral Habitat**

Chaparral, and its mixture with Riversidean Sage Scrub, is the predominant habitat and vegetation in the Calimesa area. Within the northeastern parts of the City, it exhibits some dense stands, but is frequently more open on the south slopes or where fire or grading has occurred. In graded areas, the vegetation is more open and easily traversed. Chaparral occurs in association with both major and minor canyons within Calimesa in association with other vegetation, streambanks, and cliffs. Such mixtures of habitat features increases the importance of this vegetation to wildlife. Also, the abundance of seeds and fruits produced by the different Chaparral plants provides many wildlife species with food. Numerous species of large and small mammals occur in Chaparral vegetation, as does a variety of reptiles, several amphibians, and a diverse bird fauna.

Although Chaparral is a common vegetation and habitat type within Calimesa and in Southern California, it is valuable because it forms high quality cover for wildlife. Extensive stands of this vegetation create myriad isolated habitats for species, such as the Mountain Lion, Coyote, and Bobcat that require more remote areas for breeding. Prey species taken by such predators also inhabit the Chaparral.

### **Cultivated Field Habitat**

Cultivated fields stretch across the City. While some of these have been recently cultivated, a few parcels have lain fallow for one or two years, while others presently show only minimal signs of prior farming. These latter areas have regrown with grass, scattered shrublands, or both.

Cultivated lands are generally of limited utility to wildlife while they are being actively farmed. Ground dwelling mammals are largely eliminated from fields by tilling, although ground squirrels, gophers, badgers and some other species can quickly re-invade such areas once they are abandoned. Kangaroo rats and mice also recolonize fallow fields rather quickly. A variety of birds, such as kestrels, sparrows, pipits, and horned larks, use both cultivated and fallow fields for feeding on invertebrates, seeds, and small mammals. Waterfowl, such as the Canada Goose, may occasionally forage in the fields for grain. As a plowed field is covered by a crop, a temporary ecological system is created, followed with cyclic tilling, planting, regrowth, and harvest. The population levels of wildlife using the fields are accordingly influenced.

### **Riversidean Sage Scrub Habitat**

Riversidean Sage Scrub habitat covers a large portion of the City and forms a wildlife habitat type similar to Chaparral within Calimesa. Riversidean Sage Scrub is generally more open than Chaparral and is, therefore, more easily penetrated by large mammals. For this reason, it is less effective than dense Chaparral in isolating more sensitive species from human intrusion. This vegetation supports



and harbors a variety of prey species that are utilized both by large mammalian species and larger raptors, such as the Golden Eagle. From the air or ground, the openness of this habitat permits better visibility of the prey species and greater maneuverability of the predators.

### **Riparian Woodland, Thicket, and Scrub Habitat**

Riparian vegetation form narrow corridors of wildlife habitat within the Calimesa area. They are restricted to creek beds and embankments where groundwater is most available. Intermittent creeks flowing in these beds during the winter and spring months furnish limited surface water. This water source, as well as the vegetation itself, attracts a great diversity of wildlife species.

Riparian vegetation varies considerably in its continuity, density and plant species composition. Occasionally, the riparian vegetation forms a dense canopy of willows or oaks that have very high value as wildlife habitat. Numerous bird species rest, feed, and nest in these areas, mammals hunt or den within it, and amphibians and reptiles permanently reside in these habitats. Because this habitat forms narrow bands where it occurs, its function as a wildlife habitat often benefits from human activity buffer zones in which human disturbances are minimized or not permitted.

In less well-watered sections of the creek beds, trees are more widely spaced and commonly consist of large cottonwood and sycamore trees, both of which are especially valuable to birds. These trees are the preferred nest sites for many species of hawks and owls, which may nest among their branches and in hollow trunks. The trees also serve raptors as hunting perch sites.

Riparian habitat harbors the most diverse assemblage of breeding bird species within Calimesa. It also attracts numerous mammalian, amphibian, and reptilian species because of its relatively high humidity, low temperatures, and high water availability. The spring and summer insect populations in riparian vegetation provide the primary foraging opportunities for many songbirds.

### **Oak Woodland and Savanna Habitat**

Oak Woodland and Savanna are important elements of wildlife habitat in Calimesa. This vegetation functions similarly to riparian vegetation but is used more consistently year-round since it is evergreen. Also, large holes are often found in oaks and used for nesting by owls and mammals. Acorns provide an important food source to many birds and mammals.

### **Isolated Trees**

Important habitat values, especially for birds, are contributed by single oak trees where they occur along canyon floors, or by stringers at the base of hills and along drainage channels where they drop down a slope. Throughout the City, there are oak, eucalyptus, pine, fruit, and olive trees that augment the native vegetation where urban development is adjacent to open space. These trees vary in height, structure, and location and are, therefore, suited to different bird species. Eucalyptus and oak trees are favorite perching and nesting sites for raptors, as well as for several other passerine species. Olive trees are more useful to passerine species alone, although raptors may occasionally



nest in these trees. The presence of isolated trees, stringers, or clusters in open terrain can increase open space utilization by a number of bird species that otherwise would not be present.

### **Intermittent Creeks and Ponds**

Although many of these habitat features are usually dry for several months each year, major washes, creeks, and canyons, as well as numerous smaller side creeks and ponds, are important to wildlife. Calimesa's mediterranean climate, with its normal scarcity of water, makes aquatic habitats especially valuable. Salamanders, frogs, and toads congregate in these habitats to breed and numerous other animals depend upon them for drinking and bathing.

The variety of ponds scattered across the Calimesa area attract and support (sometimes only periodically during migration) waterfowl such as ducks, and various shorebirds, such as the Greater Yellow legs. Smaller ponds are primarily breeding sites for frogs and toads. Many of these water sources dry up during warmer months, forcing animals to either travel further to obtain free water, to feed on succulent (water-containing) plant materials, to aestivate ("hibernate" during dry periods), or to die.

### **Rock Outcrops, Cliffs, and Caves**

The City of Calimesa has a variety of geologic features useful to wildlife in different ways. All of these add to the habitat structure of the vegetation with which they are associated. Rock outcrops provide crevices that support numerous lizards, invertebrates, and small mammals. Wherever rock outcrops or cliff faces contain cavities, they are potential raptor nest sites and roosting sites for bats. Red-tailed Hawks commonly found within the area, and other raptors, may nest in such cavities. Chalky cliffs along major drainage areas in the southeastern part of the City, for example, have numerous cavities that may support suitable as nest sites for bat species.

Rock formations within the area, including the rock cliff on the northern end of Singleton Road, may contain large caves which are useful to a variety of wildlife, including owls, wood rats, raptors, and larger mammals. Such sites are especially useful for bats. Geologic structures are often highly visible to humans and subject to human disturbance. Wildlife utilizing them often are especially vulnerable and sensitive to such disturbances, and vacate them when this occurs.

### **Gorges, Canyons, and Ravines**

Gorges, canyons and ravines are found throughout Calimesa. They add diversity to the structure of the existing habitats, by augmenting the variety of micro-habitats used by wildlife. Deeper canyons invariably support more lush vegetation that, in turn, create better cover and greater floral diversity in localized areas. Steeper canyon walls are favored by some raptors for nest sites. These walls also provide for soaring (usually to gain altitude on thermal or convective updrafts). Other soaring species, such as swifts, concentrate in these areas. And finally, canyons are frequently the sites of larger mammal dens. Where canyon walls are steep and extremely rugged, human intrusion is naturally restricted.

## **Elevated Structures, such as Telephone and Electrical Transmission Lines, Poles, and Fences**

Any elevated structure within Calimesa may attract a variety of birds and bats. Behavioral characteristics of each species will determine how these structures are used. Raptors, for example, generally prefer, but are not restricted to, higher perches, such as telephone or electrical transmission lines and poles. Smaller birds often use fence posts or other lower structures. Functioning similarly to isolated trees, man-made elevated structures located in open terrain can increase use of these areas by birds and bats requiring perches. Also, birds occasionally nest on or in poles and fences.

## **Miscellaneous Habitat Features**

A variety of less extensive or less obvious features within the City are important to wildlife. These features often are important to single species or particular animal groups. Such habitat relationships often may be subtle, but are nonetheless of considerable importance to maintaining a diversity of local wildlife within the Calimesa area. Some of these include the following:

- Rodent burrows are often used by species other than the resident small mammal species that created them. They are important habitat features for numerous lizards, snakes, frogs and toads, particularly in habitats with little vegetation cover. Sandy washes often contain such burrows that are easily modified by species with weak digging powers.
- Sandy washes are used by rabbits and are frequently used by larger mammals, such as Mule Deer and Mountain Lions, as movement corridors across Calimesa. Such corridors become increasingly important as development across them curtails travel by sensitive species. Raptors often hunt in these open washes, and, along with other species, nest in the sides of steep walls at the edges of washes.
- Seeps occur during wet months at numerous locations within the Calimesa area and are sites of wildlife activity. Black Bears and other mammals and birds will concentrate at seeps to drink. Amphibians concentrate around these water sources and may breed in them if sufficient water is not present in ponds.
- Freshwater marsh areas support the Common Yellowthroat. Red-winged Blackbirds also prefer this habitat.
- Rock outcrops and boulder fields are found in several areas in Calimesa. Boulders are usually associated with areas supporting Chaparral and Riversidean Sage Scrub vegetation. These rocks may be used by many species of mammals for burrowing and cover, as well as by reptiles and amphibians. Larger boulders are natural perches for birds, including raptors. Lizards regularly sun themselves on these rocks and would be less numerous without these structures.



- Ridgelines and hilltops in Calimesa are important corridors for many bird and mammal species. They form natural pathways that allow animals to observe adjacent vegetation for prey opportunities and to observe threats from predators. Hilltop vegetation is also important in providing strong uplifts of rising air currents for foraging raptors. Migratory birds frequently are forced to land in ridgeline vegetation during excessively strong winds, and to feed and rest. Hilltops may also be utilized by a number of butterfly species, and other invertebrates, for "hilltopping", an instinctive behavior associated with breeding success in some species.
- Buildings, especially abandoned farm structures, are used by numerous wildlife species. Such species take up residence in man-made structures, where suitable access and habitat characteristics are present. Species commonly found roosting in buildings include barn owls and bats. A variety of smaller birds will use the structures for nesting, as will wood rats (packrats), mice, and reptiles.

### Zoological Resources

Animals that utilize the Calimesa area include all major groups of terrestrial vertebrates. The California Statewide Wildlife Habitat Relations System (CDFG 1990) provides range maps and detailed natural history discussions of all vertebrate species found within Calimesa.

**Fish** - Native fish species are not expected within the City due to the absence of substantial permanent water.

**Amphibians** - Within the Calimesa area, three species of amphibians have been identified, including the Western Toad (*Bufo boreas*), Pacific Treefrog (*Hyla regilla*), and Bullfrog (*Rana catesbeiana*). Another eight species may be present within the area, including four species of salamanders (including the arboreal salamander), three toads species, and four frog species.

**Reptiles** - Seven species of reptiles have been reported within the City, including the Western Whiptail (*Cnemidophorus tigris*), Desert Spiny Lizard (*Sceloporus magister*), Western Fence Lizard (*Sceloporus occidentalis*), Side-blotched Lizard (*Uta stansburiana*), Racer (*Coluber constrictor*), Western Aquatic Garter Snake (*Thamnophis couchii*), and Gopher Snake (*Pituophis melanoleucas*). Many species of reptiles, particularly snakes, are very secretive and difficult to find even under ideal conditions, and, no doubt, the herpetofauna is much larger than this would indicate. An additional 25 reptile species may be found within the area.

**Birds** - A total of 80 bird species have been reported from within the area. Another 122 species may possibly utilize the area, many of which are winter visitors that may stop to rest or forage before moving on. Many resident species may move from higher elevations, downslope into the area during the winter. Six raptor species were observed in Calimesa. The general area of the City is famous for its rich over-wintering bird fauna. The San Jacinto Valley, south of Calimesa, is a rich center



of bird diversity, and many species pass through, or forage within, the City as they seasonally and daily move about the region. Potentially, about 20 species of raptors may utilize the area. Most of which have large foraging ranges and movement patterns that include the Calimesa area. Nests utilized by these birds are generally constructed on large trees, in crevices and on ledges of steep walled canyons, and on high man-made structures, all of which occur in many places within the City.

Passerine birds associated with fields, scrub and woodland habitats are abundant within the area. Natural overlap occurs broadly between the different bird groups and habitats. High densities are expected in all the migratory warblers, vireos, and other songbirds. Well-developed Riparian Woodland, being relatively scarce in Southern California, is very important as nesting habitat for these birds. This habitat generally supports the highest diversity of species within the Calimesa area, and is expected to support the greatest number of raptor nests in the vicinity.

The various scrub habitats within the City, being the largest in areal extent, likely support the next most diverse bird fauna. Agricultural land and grasslands are used extensively by some species for nesting, but primarily for foraging.

**Mammals** - A total of 15 species of mammals were reported observed within the Calimesa area. A total of another 42 mammal species may be present within the planning area. Around 20 species of bats may utilize the area throughout the year, although the specific requirements of most of these species are relatively unknown. Mountain Lions (*Felix concolor*) are present throughout the open spaces in the vicinity. They occur primarily in rugged and brush-covered areas of the area, where they feed primarily upon Mule Deer. They may occasionally take feral or pet domestic animals. Mountain Lions travel considerable distances within their territories and may be found anywhere within the area, but are expected to avoid more urbanized sites.

Other predatory mammal species observed or expected in the City include the Gray Fox (*Urocyon cinereoargenteus*), Coyote (*Canis latrans*), Bobcat (*Lynx rufus*), Badger (*Taxidea taxus*), Ringtail (*Bassariscus astutus*), and Raccoon (*Procyon lotor*). The Badger is observed very infrequently in southern California, but was probably more common in the region prior to agriculture and poison campaigns against ground squirrels, their favorite prey species. The extensive fields, grasslands, and abundant ground squirrels, as well as the presence of at least one apparent Badger burrow, suggests that the species still may be present.

The Coyote, Bobcat, Black Bear, and Gray Fox are very common in the area. The Ringtail, reported to occur in the Badlands southeast of Calimesa, are likely present where rocks and water are present. Raccoons are common wherever a regular supply of water occurs.

A variety of small mammals is present within the City, including the Pacific Kangaroo Rat, generally found living within scrub habitats. This species is expected in Riversidean Sage Scrub and Mixed Chaparral vegetation. The Stephens' Kangaroo Rat (*Dipodomys stephensi*), a federally endangered species and state-listed threatened species, appears to reach its northern distributional limits just south of Calimesa. This species is a grassland/herbland species that occupies areas adjacent to Riversidean

Sage Scrub vegetation throughout its range. Although open grasslands in the southern sections of Calimesa appear to be ideal habitat for the Stephens' Kangaroo Rat, none has been reported from trapping or diagnostic sign data to date, within the Calimesa area itself.

### **Sensitive Biological Resources**

Table 4-2 summarizes the sensitive biological resources that may be found in the Calimesa area.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
<u>Plants</u>			
Slender-horned Spineflower <i>Dodecahema leptoceras</i>	FE,SE	Primarily on stream terraces within alluvial scrub vegetation.	Possibly present in Calimesa Plan Area. Recently discovered in open Chaparral vegetation near Lake Skinner. Present in Santa Ana River near Redlands.
Hall's Manardella <i>Monardella macrantha ssp hallii</i>	C3, CNPS 1B	Broadleaved uplands forests and lower montane chaparral, usually with coniferous elements. Dry slopes and ridges in openings of Chaparral.	May possibly occur in dry openings in NE portions of Calimesa Plan Area.
Santa Ana River Woollystar <i>Eriastrum densifolium ssp sanctorum</i>	FE,CE	Alluvial fans and terraces within floodplains associated with Chaparral and Coastal Sage Scrub in sandy soils.	Known from the Santa Ana River wash north of Redlands. Also in Mill Creek. Unlikely to occur in sandy washes of Calimesa Plan Area, but is possible.
Los Angeles Sunflower <i>Helianthus nuttallii ssp parishii</i>	C1	Associated with freshwater marshes.	Present in Mill Creek near Mountain Home in San Bernardino Mountains and may possibly be present in planning area around seeps.
Nevin's Barberry <i>Mahonia nevinii</i>	C1, CNPS 1B	Along roadside cuts and in sandy, gravelly alluvial washes below 2,000 ft elevation.	Potential habitat in sandy alluvial areas and on terraces above and within drainage channels.
Payson's Jewelflower <i>Calanthus simulans</i>	C2, CNPS 4	Rocky places between 2000 and 5,500 ft elevation.	Suitable habitat throughout Calimesa Plan Area. Known from near Banning in burned Chaparral.
Parrish's Bush Mallow <i>Malacothamnus parishii</i>	C2, CNPS 1B		Suitable habitat between 1,000 and 1,500 ft elevation in Calimesa Plan Area.
<u>Animals - Amphibians</u>			



TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
California Tiger Salamander <i>Ambystoma tigrinum californiense</i>	C2	Annual grasslands and grassy understory of Oak Woodlands, uncommonly along stream courses. Generally live in ground squirrel burrows. Vernal pools may be needed for breeding.	Historic record in San Jacinto Mountains (CNDDDB 1993) but species is generally distributed in central California. Is unlikely to be present in General Planning Area.
California Newt <i>Taricha torosa</i>	CSC	Within valley-foothill Oak Woodlands, Riversidean Sage Scrub, Mixed Chaparral, Animal Grasslands. Species is diurnal.	Suitable habitat within Calimesa Plan Area where sufficient moisture is available. Often, rainfall patterns control above-ground activities.
Ensatina <i>Ensatina eschscholtzi</i>	CSC	Mixed Chaparral and other higher elevation communities. Active on surface when wet. Retreats under logs, rocks, litter.	May be present in scrub habitat throughout Calimesa Plan Area.
Arroyo Toad <i>Bufo [Microscaphus] californicus</i>	C1,CSC	Gently sloping washes, stream, and arroyos, especially those with sandy banks supporting willow, cottonwoods, or sycamores.	Suitable habitat present in steam canyons throughout Calimesa Plan Area.
Western Spadefoot Toad <i>Scaphiopus hammondi</i>	CSC	Vernal Pools and ephemeral ponds, and cow wallers. Use upland vegetation, such as Grasslands, and Coastal Sage Scrub.	Reported from between Banning and Beaumont. May be present in upland areas and within major washes of Calimesa Plan Area.
California Red-legged Frog <i>Rana aurora draytonii</i>	C1,FPE,CSC	Quiet pools of streams, marshes, and ponds with year round water, with emergent aquatic or overhanging vegetation.	May be present in San Timoteo Canyon, and in other aquatic habitats throughout Calimesa Plan Area where water quality is high.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
<u>Animals - Reptiles</u>			
Western Pond Turtle <i>Clemmys marmorata pallida</i>	F1,FPE,CSC	Aquatic habitat where there is permanent water, or where permanent water is nearby. Needs open mud banks, basking logs, rocks, Mw floating vegetation for basking.	May be present in San Timoteo Canyon, or possibly in ponds within intermittent streams.
San Diego Horned Lizard <i>Phrynosoma coronatum blainvillei</i>	C2, CSC	Open areas of friable, rocky, and sandy soil within Coastal Sage Scrub and Chaparral. Feeds on harvester ants.	Present in Badlands to south of Calimesa Plan Area. Likely present throughout planning area.
Orange-throated Whiptail <i>Cnemidophorus hyperythrus</i>	C2,CSC	Inhabits Chaparral, Coastal Sage Scrub, and Valley Oak Forests. Prefers washes and other sandy areas with patches of brush and rock.	Suitable habitat in Coastal Sage Scrub and mixed Chaparral present within the planning area.
Western Whiptail <i>Cnemidophorus tigris multiscutatus</i>	C2	Found in Oak Woodlands, Mixed Chaparral, Annual Grasslands, and Riparian habitats in various combinations. Diurnal.	May be present throughout Calimesa Plan Area, likely in conjunction with scrub habitats and understories. Prefer dense vegetation areas for foraging.
Silvery Legless Lizard <i>Anniella pulchra</i>	CSC	Sandy washes, Coastal Sage Scrub, and Woodland Habitats.	Drainages, Coastal Sage Scrub, and Woodlands along drainages within the planning area provide suitable habitat.
Rosy Boa <i>Lichanura trivirgata</i>	CSC	Chaparral habitats, generally on rocky hillsides and canyons. Very secretive.	May be present throughout Calimesa Plan Area in scrubby areas where rock outcrops are present.
San Diego Ringneck Snake <i>Diadophis punctatus similis</i>	C2	Moist, open, relatively rocky areas within Chaparral, Grasslands, and Riversidean Sage Scrub habitats. Secretive snake.	May be present throughout the Calimesa Plan Area where moist situations persist.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
Western Patch-nosed Snake <i>Salvadora hexalepis virgultea</i>	C2,CSC	Chaparral, washes, sandy flats and rocky areas. Diurnal. Takes refuge in rocks, bushes, and burrows of other animals.	May be present in scrubby areas throughout the Calimesa Plan Area.
Red Diamond Rattlesnake <i>Crotolas ruber</i>	C2,CSC	Chaparral and Oak Woodlands in rocky areas and dense vegetation. Active from mid-spring to mid-fall.	May be present in most areas of Calimesa Plan Area, except perhaps within large open grasslands.
<u>Animals - Birds</u>			
Least Bittern <i>Ixobrychus exilis</i>	CSC	Wetland areas with emergent vegetation. Very secretive.	May be present during southward migrations to Mexico for over-wintering.
Black-shouldered Kite <i>Elanus caeruleus</i>	CP,FP	Closely associated with agricultural areas in lowlands. Inhabits herbaceous and open stages of habitat of scrublands and grasslands.	May be present throughout the Calimesa Plan Area. Resident species where rodents live in open scrub and field habitats.
Bald Eagle <i>Haliaeetus leucocephalus</i>	CE,FE, CP	Local winter migrant of Big Bear Lake. Forages southward throughout the San Jacinto and Perris Valleys, including the Calimesa area. Feeds in aquatic areas.	May pass over, rest, or possibly forage in Calimesa Plan Area, most likely where poles, fences, or towers provide perches over flooded fields where rodents are present.
Northern Harrier <i>Circus cyaneus</i>	CSC	Annual Grasslands, meadows, riparian areas, open scrubland. Avoids wooded areas. Feeds on small mammals, birds, frogs, reptiles, and insects. Nest on the ground in shrubby vegetation.	Visitor throughout most of the Calimesa Plan Area, especially around open agricultural fields, meadows, and grasslands. May nest within Calimesa Plan Area.



TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
Sharp-shinned Hawk <i>Accipiter striatus</i>	CSC	Open deciduous woodlands, mixed or coniferous forests.	Winter migrant using riparian and oak woodlands throughout Calimesa Plan Area, and may stay within area for winter.
Cooper's Hawk <i>Accipiter cooperii</i>	CSC	Dense stands of live oaks, riparian deciduous area, generally near water. Utilizes woodland edges.	Winter resident that may sometimes breed in oak woodlands found throughout Calimesa Plan Area.
Merlin <i>Falco columbarius</i>	CSC	Uncommon winter migrant in open grasslands, savannas, woodlands, lakes. Feeds on small birds, insects, and mammals.	Possibly present during winter as it wanders in search of prey.
Peregrine Falcon <i>Falco peregrinus</i>	CE,FE, CP	Uncommon breeding resident in other California areas that may migrate in spring and fall.	Possible may be present in planning area during migratory periods.
Prairie Falcon <i>Falco mexicanus</i>	CSC	Forages in dry, open country and grasslands. Normally nests in rock outcrops.	Likely to occasionally occur in winter within open grasslands in Calimesa Plan Area. Suitable rock outcrops, needed for nesting, are infrequent within the planning area.
Ferruginous Hawk <i>Buteo regalis</i>	CSC	Winter resident of open grasslands and brush flats.	Known to be present in grasslands within the Calimesa Plan Area.
Golden Eagle <i>Aquila chrysaetos</i>	CSC	Rolling foothills where rabbits and rodent occur, including grasslands, savannas, and open shrub habitats.	An uncommon resident forages over the entire Calimesa Plan Area. Unlikely to breed in immediate vicinity.
American Kestrel <i>Falco sparverius</i>	CSC	Winter resident of open habitat. Takes a variety of prey. Nests in cavities of trees, snags, rock crevices, cliffs, banks, and buildings.	May be preyed upon by larger raptors. Expected throughout Calimesa.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
Mountain Plover <i>Charadrius montanus</i>	CSC	Short grasslands and plowed fields. Present during winter in valleys of western Riverside County.	May be present in agricultural and grassy fields during the winter.
Long-billed Curlew <i>Numenius americanus</i>	CSC	Aquatic and upland herbaceous areas. Pastures with wet areas are sometimes used for feeding.	May be present in the Calimesa Plan Area in Fall as they move to summer breeding grounds. Large populations occur both north and south of the Calimesa Plan Area.
California Gull <i>Laurs californicus</i>	CSC	Visitor to inland lowlands in non-breeding season. In August and September, is found around landfill sites in large numbers.	May be present in late summer or early fall during movements from breeding grounds. May be attracted to any landfills containing garbage within the Calimesa Plan Area.
Yellow-billed Cuckoo <i>Coccyzus americanus</i>	CE,CSC	Rare summer resident in southern California where densely foliated riparian trees and shrubs, especially willows, allow breeding.	May be present in dense riparian vegetation of San Timoteo Canyon, or where other dense riparian woodlands or thickets occur.
Long-eared Owl <i>Asio otus</i>	CSC	Riparian Woodland and Oak Woodland. Riparian areas required in vicinity. Uses thickets with small, densely canopied trees for roosting and nesting.	Present in Singleton Ranch area, and likely in other Riparian and Oak Woodlands within Calimesa Plan Area.
Burrowing Owl <i>Athene cunicularia</i>	CSC	Forages and nests in open grasslands, prairie, often within ground squirrel or badger burrows. Roosts in trees in non-breeding season.	May persist in open areas throughout the Calimesa Plan Area. Not observed during field surveys, but present throughout region. Would likely reside in areas with high densities of rodent burrows.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
California Horned Lark <i>Eremophila alpestris actia</i>	C2	Open habitats, usually where trees and large shrubs are absent. Grasslands and low chaparral habitats may be used. Uses shrubs, forbs, rocks, litter, clods of soil, for cover.	May be present yearlong within the Calimesa Plan Area wherever grasslands, agricultural fields, and open shrublands persist.
San Diego Cactus Wren <i>Campylorhynchus brunneicapillus sandiegensis</i>	C2,CSC	Resident of succulent vegetation where it forages on the ground and in low vegetation for insects, cactus fruits, and other foods. Thickets of xeric (dry) vegetation used for nesting and roosting.	May be present in Calimesa Plan Area where stands or clumps of cactus are present. Frequently associated with Coastal Sage Scrub vegetation. May be present in sparse Chapparal areas where stiff-twigged, thorny shrubs are found.
Least Bell's Vireo <i>Vireo bellii pusillus</i>	FE, SE	Summer resident of low riparian growth in vicinity of water or in dry stream bottoms below 2,000 ft elevation. Usually nests where willows or baccharis are present.	Reported from San Timoteo Canyon and from near Banning in riparian habitat. May be present in other less developed riparian woodlands on occasion.
California Gnatcatcher <i>Poliopitila californica</i>	C2, CSC, FT	Artemisia-dominated Coastal Sage Scrub, which in planning area is marginally suitable.	Possibly present in Coastal Sage Scrub within planning area. Present in Badlands to the south of Calimesa Plan Area, but only in small numbers.
Yellow Warbler <i>Dendroica petechia brewsteri</i>	CSC	Summer breeder in riparian woodlands of lowlands that include stands of willows, alders, and other small trees and shrubs in low, open-canopy riparian areas.	May be present in low numbers throughout the Calimesa Plan Area where riparian vegetation is present.
Yellow-breasted Chat <i>Icteria virens</i>	CSC	Uncommon summer resident and migrant in riparian habitats that have brush tangles and dense shrubs.	May pass through Calimesa Plan Area as migrant between April and September.



TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
Rufous-crowned Sparrow <i>Aimophila ruficeps canescens</i>	C2	Sparse, mixed chaparral Mwd Riversidean Sage Scrub, usually in steep-sided, rocky hillsides with patches of grass and forbs. Found on grassy slopes where rock outcrops are present.	May be found throughout the Calimesa Plan Area where shrubby vegetation is present.
Bell's Sage Sparrow <i>Amphispiza belli</i>	C2	Low, fairly dense stands of shrubs. Chaparral dominated by Chamise, and Riversidean Sage Scrub dominated by sages.	May be present throughout the Calimesa Plan Area where shrubs are present.
Tri-colored Blackbird <i>Agelaius tricolor</i>	CSC,C2	Resident species that breeds near water, preferably where emergent wetland vegetation, such as tall, dense cattails and tules are present. Feeds in cropland and grassland habitats.	May be present in riparian areas with cattails and tules, and in agricultural areas and grasslands throughout the Calimesa Plan Area.
Loggerhead Shrike <i>Lanius ludovicianus</i>	C2	Lowland, open habitats with scattered shrubs, trees, posts, fences, utility lines, and other perches. Occurs in open-canopied oak woodlands. Rarely found in heavily urbanized areas, but is often found in croplands. Uses edges of dense habitats.	Common resident throughout the Calimesa Plan Area, nesting in trees and shrubs. Forages over croplands, grasslands, meadow, and scrub habitat.
<u>Animals - Mammals</u>			
Ornate Shrew <i>Sorex ornatus</i>	CSC	Valley foothill woodlands and riparian areas, chaparral, grassland, and wetland habitats. Nests in wood, shrubs, and burrows.	Possibly present throughout the Calimesa Plan Area.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
Spotted Bat <i>Euderma maculatum</i>	CSC	Grasslands and wooded habitats near water. Feeds in flight over water, near the ground. Roosts in rock outcrops, caves, buildings, and cliffs. One of the rarest mammals in North America.	May be present near riparian areas throughout the Calimesa Plan Area.
Townsend's Big-eared Bat <i>Plecotus townsendii pallescens</i>	C2,CSC	May be found in any season and any habitat in the Calimesa Plan Area. It is most common in mesic (moderately moist) habitats. Roosts in caves, mines, tunnels, buildings, or other man-made structures.	May be found where trees and brush provide habitat edges for feeding throughout planning region.
California Mastiff Bat <i>Eumops perotis californicus</i>	C2, CSC	Arid lowlands. May roost in rock outcrops and crevices, or in buildings. Forage up to 15 miles from day roost.	Suitable foraging and roosting habitat is present in the General Planning Area.
Black-tailed Hare (Jackrabbit) <i>Lepus californiucus bennettii</i>	C2	Open chaparral and sage scrub habitats at lower elevations. Often uses washes and other edge habitats for foraging for herbaceous vegetation.	May be found in washes and shrubby areas of woodlands throughout the Calimesa Plan Area.
Los Angeles Pocket Mouse <i>Perognathus longimembris brevinasus</i>	C2, CSC	Found on fine soils and sand, living under leaf litter. Feeds on seeds and green vegetation of grasses, forbs, and shrubs.	Known from NE of Beaumont and near Eden Hot Springs. Potential habitat within Calimesa Plan Area, including grasslands, Riversidean Sage Scrub, Chaparral, possibly some sandy riparian area.
Stephens' Kangaroo Rat <i>Dipodomys stephensi</i>	FE,ST	Open grasslands and fields adjacent to Coastal Sage Scrub and Chaparral with low grasses and forbs. Areas with scattered shrubs of less than 30% cover may be utilized.	Possibly present in grasslands and adjacent agricultural areas in south portion of Calimesa Plan Area. Present near Interstate 10 just south of the planning area.

TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i>	C2	Fine sandy to gravelly soils with areas of sparse to moderate canopy of vegetation. Grains are taken for food. This subspecies was recently rediscovered in the Santa Ana River and other areas after decades of no captures.	May be present in washes of Calimesa Plan Area. This primarily desert species may have penetrated into the coastal basins through the Beaumont Plain, crossing through the Calimesa area.
Southern Grasshopper Mouse <i>Onychomys torridus ramona</i>	C2,CSC	Coastal Sage Scrub, Mixed Chaparral, wash, and riparian areas. Feeds on arthropods, including scorpions. Nests in abandoned burrows of other rodents.	May be present throughout the Calimesa Plan Area.
Desert Woodrat <i>Neotoma lepida intermedia</i>	C2,CSC	Present in riparian and shrubby habitats in southern California, but prefers rocky areas. Constructs houses of twigs, sticks, cactus parts, rocks, and man-made materials (Packrats).	May be found in woodlands, thickets, and shrubby areas throughout the Calimesa Plan Area.
Badger <i>Taxidea taxus</i>	CSC 3	Grasslands and savannas, generally where ground squirrels are abundant.	Badger burrows have been reported within the Calimesa Plan Area.



TABLE 4-2  
SENSITIVE, THREATENED, AND ENDANGERED SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN CALIMESA

Species	Status	Habitat	Occurrence
Status Codes:			
FE	Listed as endangered by the federal government (USFWS)		
FT	Listed as threatened by the federal government (USFWS)		
C1	Category 1 candidate species for federal listing as endangered or threatened (taxa for which the USFWS has sufficient biological information to support a proposal for listing as endangered or threatened.)		
C2	Category 2 candidate species for federal listing as endangered or threatened (taxa for which existing information indicates that a listing may be warranted, but for which sufficient biological information to support a proposed rule is lacking.)		
FPE	Petitioned for federal listing as endangered or threatened.		
PrFET	Proposed by USFWS to list as Endangered or Threatened.		
SE	Listed as endangered by the State of California.		
CE	Listed as endangered by the State of California.		
ST	Listed as threatened by the State of California.		
CSC	California Department of Fish and Game (CDFG) Species of Special Concern.		
FP	Fully protected in California; a designation given before enactment of the state Endangered Species Act.		
CNPS 1A	Plant presumed extinct in California.		
CNPS 1B	Plants considered rare, threatened, or endangered in California and elsewhere.		
CNPS 4	Plants of limited distribution - A watch list.		

## Sensitive Plants

Several sensitive plant species may occur within Calimesa but local elevations are not high enough to support many of the sensitive montane elements of the San Jacinto Peak region (Bryant 1982). One sensitive plant, the Fallbrook Spineflower (*Chorizanthe procumbens* var. *albiflora*), is known to occur in Singleton Canyon (Dames and Moore 1987). Generally, this plant is found in Coastal Sage Scrub and Chaparral vegetation below the 2,500 feet elevation, mostly in sandy places. It may occur throughout Calimesa within these habitats, including all sandy washes on sites where scrub vegetation is found adjacent to upland areas.

Additional sensitive plants identified by the CDFG as potentially occurring within the City include the following:

The Payson's Jewelflower (*Caulanthus simulans*) is found uncommonly in rocky places between 2,000 and 5,500 feet in elevation in Chaparral vegetation and may include the northeastern section of Calimesa where mixed Chaparral dominates.

The Crownscale (*Atriplex coronata* var. *notatior*) is found in the San Jacinto Valley in alkaline flats. Due to the lack of such alkaline vegetation within Calimesa, it is very unlikely that this plant is present.

The Hall's Monardella (*Monardella macrantha* sp. *hallii*) is a federal Candidate 3C species for listing as endangered or threatened and is listed by the CNPS as category 1B. This species is associated with Chaparral dry slopes and ridges between 2,500 and 6,000 feet in elevation and may possibly be present in the northeastern sections of the City wherever granitic rocky soils are exposed in open areas free of shrubs.

The Parish's Checkerbloom (*Sidalcea hickmanii* sp. *parishii*) is a federal Category 2 species for listing as endangered or threatened, and listed by the CNPS in category 1B. It is found on dry Chaparral slopes between 5,000 and 6,000 feet in elevation and is not expected within the City.

The Santa Ana River Woollystar (*Eriastrum densifolium* sp. *sanctorum*) is a federally listed Endangered species, a state-listed Endangered species, and a CNPS Category 1B species. It is found in sandy soils on river flood plains or alluvial terraces. The City does not support large areas where this species might be found, since it lacks broad river flood plains generally associated with this species.

Other sensitive plants that might be found within the lower elevations of the area include the following but none of these has been reported from within the City:

The Nevin's Barberry (*Berberis nevinii*) is found in sandy and gravelly places below 2,000 feet in elevation in Coastal Sage Scrub and Chaparral vegetation.

The Mohave Tarplant (*Hemizonia mohavensis*) is a rare plant found above 3,000 feet in elevation in Chaparral areas and is not likely to occur within the City.

A Mohave Desert-centered Locoweed (*Astragalus lentiginosus* var. *borreganus*) has been reported within the Badlands vicinity. This plant is generally found below 1,000 feet in elevation in dunes and sandy valleys of Creosote Bush Scrub, and is unlikely to be present in the City.

The Desert Hackberry (*Celtis reticulata*) has been reported in the Badlands. It normally occurs in scattered damp places within desert habitats between 2,800 and 5,000 feet in elevation. It is very unlikely to be present in Calimesa.

### **Sensitive Vertebrates**

Table 4-2 lists 66 sensitive species that may potentially be found within the Calimesa area. Some of these species are expected to be rare visitors, while others may be common within the limits of a scarce resource, such as riparian areas, rendering them as sensitive biological indicators. The Stephens' Kangaroo Rat, a federally endangered species, may be present within the area. The California Gnatcatcher, a species recently listed as Endangered by the USFWS, is a potential resident. The federal listing of the Stephens' Kangaroo Rat and the listing of the California Gnatcatcher have prompted considerable efforts within the region to produce Habitat Conservation Plans for these and other species in western Riverside County. A region-wide, Multispecies Habitat Conservation Strategy/Plan (1991, hereafter referred to as the MSHCS) program has been jointly initiated by the Riverside County Habitat Conservation Agency, the Western Riverside Council of Governments, and the Riverside County Parks and Open Space District to provide for region-wide planning solutions for sensitive biological resources. At least 9 agencies, beside the City of Calimesa, have regulatory or jurisdictional authority over lands designated in the potential reserve. Once this strategy has been reviewed, revised, and approved by the affected agencies, it is expected to become a statutorily enforced plan.

A portion of the Calimesa area southwest of Interstate 10 is designated in the MSHCP document as a part of a larger potential Multispecies Reserve (the "Badlands/San Jacinto River Reserve). This potential reserve meets all the criteria for a Reserve and Corridor System that would biologically link most of the open space areas remaining in western Riverside County. The potential Badlands/San Jacinto Reserve is known to support 18 sensitive vertebrate wildlife and 7 sensitive plant species and is envisioned to be built upon the Stephens' Kangaroo Rat Reserve System (now being finalized by the RCHCA).

The Calimesa area is known to support, or to potentially support, the following sensitive vertebrate species:



## Sensitive Amphibians

The California Tiger Salamander (*Ambystoma tigrinum californiense*) is a federal Category 2 candidate for listing as threatened or endangered. It is most commonly found in annual grass habitat, and in the grassy understory of oak woodland habitats, and uncommonly found along stream courses. It is primarily distributed in the Central Valley of California at elevations of less than 1,000 feet. Adult salamanders live mostly in underground refuges, especially ground squirrel burrows and man-made structures. They may be located under rocks and logs during the breeding season. They lay their eggs in vernal pools and temporary ponds, and sometimes use permanent man-made ponds, if predatory fish are absent. They rarely use streams. Badgers and garter snakes prey upon this species, as do wading birds, such as herons and egrets.

The California Newt (*Taricha torosa*) is a California Species of Special Concern that is found primarily in the Coast Ranges and Sierra Nevada, primarily in the foothills. It occupies oak woodlands, coastal sage scrub, and mixed chaparral areas. It also uses annual grasslands and mixed conifer vegetation. Newts seek cover under rocks and logs, in mammals burrows, rock fissures, or man-made structures, such as wells, and undercut banks. Their optimum habitats within the Calimesa area likely are in or near streams in woodland habitats. This species produces a toxin in its skin that inhibits most predators from taking it.

The Ensatina (*Ensatina eschscholtzi*) is a California Species of Special Concern that is found throughout the mountains of California, representing seven subspecies within habitats usually supporting coniferous vegetation. They also are known to inhabit mixed chaparral, and may occur in the northeastern portion of the City. These salamanders retreat to rodent burrows and other moist underground areas, as surface moisture declines in the summer. During moist periods, they are found under surface rocks, logs, boards, and moist leaf litter. Eggs are laid under objects creating a moist surface, such as logs or pieces of bark. This salamander is preyed upon by Pacific Giant Salamanders, Red-legged Frogs, garter snakes, Rubber Boas, and Stellar Jays. Other predators include large predatory water beetles, Jerusalem Crickets, Arboreal Salamanders, Ringneck Snakes, Sharp-tailed Snakes, white-footed mice, shrews, raccoons, and bears.

The Arroyo Toad (*Bufo [Microscaphus] californicus*) is a federal Candidate 1 species for endangered or threatened, and a California Species of Special Concern. The species is distributed along the coastal foothills of southern California in semi-arid regions and near washes and intermittent streams. Its habitat includes, among others, mixed chaparral and sagebrush vegetation. It lays its eggs in clear streams and shallow ponds, among leaves, gravel, and sticks. Clear standing water is required for egg deposition. It is often found near streams with sandy banks, willows, cottonwoods, and sycamores in foothill riparian habitats, but also in loose gravelly areas of streams in drier portions of its range.

The Western Spadefoot Toad (*Scaphiopus hammondi*) is a California Species of Special Concern that ranges throughout the Central Valley and adjacent foothills, primarily in grassland situations. They sometimes occupy oak woodlands and may persist in orchard and vineyard habitats. They are

rarely found on the surface and generally remain deeply buried, sometimes in mammals burrows, but usually in burrows they construct. They breed almost exclusively in shallow, temporary pools formed in heavy winter rains. Grasslands with shallow temporary pools, therefore, are the optimal habitat for this species. This species may be preyed upon by wading birds and mammals, including raccoons.

The California Red-legged Frog (*Rana aurora*) is a federal Candidate 1 species for listing as endangered or threatened, and a petition for listing the species has been submitted to the USFWS. It is a California Species of Special Concern. This species occupies quiet pools of streams, marshes, and ponds throughout its range, which, in southern California, covers the coastward mountains. It is highly aquatic, preferring shorelines with extensive vegetation. Aquatic invertebrates and vertebrates prey upon this species. These predators include fish, other amphibians, snakes, and bird or mammals, especially during the early stages of this species' life cycle.

### **Sensitive Reptiles**

The Western Pond Turtle (*Clemmys marmorata*) is found in aquatic habitats throughout much of California west of the Sierra crest. It is associated with permanent water in streams, ponds, irrigation ditches, and pools where objects, such as logs and rocks, are available for basking. This species, especially when young, is preyed upon by fish, bullfrogs, garter snakes, wading birds, and some mammals.

The San Diego Horned Lizard (*Phrynosoma coronatum blainvillei*) is a federal Candidate 2 species for listing as endangered or threatened. It occupies woodland, riparian, juniper, and grassland habitats, among others from the Central Valley to coastal southern California. It forages for ants and beetles in open areas, usually between shrubs, relying partially on camouflage for protection. Open sandy areas in washes, flood plains, and wind-blown deposits appear to be the preferred habitat. Predators of the horned lizards include Leopard Lizards, sidewinders, striped whipsnakes, Loggerhead Shrikes, and hawks.

The Orange-throated Whiptail (*Cnemidophorus hyperythrus*) is a federal Candidate 2 species for listing as endangered or threatened, and is a California Species of Special Concern. It is found only in coastal areas of western Riverside, Orange, San Bernardino, and San Diego Counties where it inhabits low-elevation coastal sage scrub, chamise chaparral, mixed chaparral, and oak woodlands. This extremely active lizard takes cover in dense vegetation when pursued, and prefers washes and other sandy areas with patches of rocks and shrubs. Diurnal snakes and predatory birds probably utilize this species for prey.

The Western Whiptail (*Cnemidophorus tigris multiscutatus*) is widely distributed over California, but is uncommon. It is a federal Candidate 2 species for listing as endangered or threatened. It exists in a number of habitats, including chamise and mixed chaparral, annual grasslands, and Riversidean Sage Scrub. It forages around the base of plants, and rarely strays far away from dense vegetation.



The whiptails are found in sandy areas along gravelly arroyos and washes. Diurnal predators, including snakes, larger lizards, and predaceous birds, may eat this lizard.

The California Legless Lizard (*Anniella pulchra*) is listed as a Protected and Sensitive Reptile by the CDFG (1977, 1988, 1989); has been proposed for classification as Rare (Bury 1971); and is listed by the IUCN (1979) as Endangered. It is found in coastal California from San Francisco south to Baja California. The species' habitat includes areas of loose soil, but particularly in alluvial fans. Its biological status is unknown, but appears to occur only in highly localized populations. The California Legless Lizard is an expected resident along sandy washes where leaf litter under cottonwoods and willows accumulates. This lizard may be eaten by Alligator Lizards, snakes, birds, and small mammals.

The Rosy Boa (*Lichanura trivirgata*) is a California Species of Special Concern that occurs in chaparral and desert habitats throughout southern California. It prefers area of moderate to dense vegetation and rocky cover. Sites within the Calimesa area that provide a mixture of bushy cover and rocky soil, such as canyons, hillsides, and washes are the preferred habitat. Rosy Boas probably are eaten by roadrunners, owls, coyotes, weasels, and other mammalian prey.

The San Diego Ringneck Snake (*Diadophis punctatus*) is a federal Candidate 2 species for listing as endangered or threatened. It is widespread in California except for the Central Valley, eastern Sierras, and desert. It inhabits open, relatively rocky areas within woodlands, mixed chaparral, and annual grasslands. It is frequently found under boards and rocks, rock piles, wood piles, rotting wood, and stable talus. Ringneck snakes probably are eaten by other snakes, diurnal birds, and perhaps small mammals.

The Western Patch-nosed Snake (*Salvadora hexalepis*) is a federal Candidate 2 species for listing as endangered or threatened, and is a California Species of Special Concern. It occurs widely throughout the lowlands in the south half of the State. It is found in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas. This active, diurnal snake takes refuge in bushes, rocks, and burrows of other animals. It is a broad generalist in its diet and habitat requirements. This snake is probably preyed upon by raptors, diurnal mammalian carnivores, roadrunners, kingsnakes, and other snakes.

The Red Diamond Rattlesnake (*Crotalus ruber*) is a federal Candidate 2 species for listing as endangered or threatened. It occupies the western portions of Riverside, San Diego, and San Bernardino Counties in chaparral, woodlands, and arid habitats in rocky areas and dense vegetation. It often retreats into rodent burrows or rock crevices, or under surface cover when disturbed. This snake is probably fed upon by kingsnakes, roadrunners, and owls.

### **Sensitive Birds**

The Least Bittern (*Ixobrychus exilis*) is a California Species of Special Concern that generally is found around the Salton Sea and Colorado River. It migrates to Mexico for the winter and may



utilize wetlands in the Calimesa area during its migrations. It is not expected to be resident in the planning area.

The Black-shouldered Kite (*Elanus caeruleus*) is listed as Fully Protected by the CDFG (1977, 1988, 1989). This species' distribution includes California's Central Valley and coastal California, with extensions north into Oregon and south into northern Baja California, Mexico. Northeastern mainland Mexico populations often extend north into the United States. Their habitat is primarily Grasslands, agricultural fields, and occasionally, shrub lands of California's coastal valleys and plains. Marshes and grassy bottom lands where large clumps of trees are adjacent to foraging habitat are favorite sites for winter roosts. The Black-shouldered Kite is a year-round resident that nests in Riparian and Oak Woodlands. The biological status of this species is being threatened within its center of abundance in Southern California, which includes the coastal valleys and plains of San Diego, Orange, and western Riverside counties. These are areas that are currently undergoing large-scale and rapid habitat conversion due to residential development. While historic population fluctuations have made the bird's present status difficult to determine, the numbers of breeding individuals are thought to be declining locally in some areas. Wintering populations may be diminishing as well, due to the loss of winter foraging habitat and roost sites.

The Bald Eagle (*Haliaeetus leucocephalus*) is a federally Endangered species, state Endangered species, and California Protected Species that breeds around lakes and reservoirs in northern California, but winters in southern California inland waters, including the Big Bear Lake area. It frequently forages in the San Jacinto Valley during early dawn and late afternoon, passing over the Calimesa area, but is not expected to extensively utilize the planning area.

The Northern Harrier (*Circus cyaneus*) is listed by Audubon on its Blue List (Tate 1986 and Everett 1979) as Declining, and by Remsen (1980) as Priority II. The species is distributed widely across North America, but is a very localized breeder. Its habitat consists of Coastal Salt Marsh, Freshwater Marsh, grasslands, and agricultural fields. The latter three of which are found within the Calimesa area. Its biological status has declined as a breeder in Southern California due to loss of habitat. The Northern Harrier is a winter resident and may nest within the Calimesa area.

The Sharp-shinned Hawk (*Accipiter striatus*) is listed by Remsen (1980) as Priority III and by Audubon on the Blue List (Tate 1986). It once was a fairly common winter resident in Southern California and possibly breeds in northern California. It occupies mixed woodlands, but is widespread in a variety of habitats during the winter. It once nested in the Southern California mountain ranges but its biological status has declined. The Sharp-shinned Hawk possibly nests in the San Jacinto Mountains, although summer sightings are rare, and its breeding status is uncertain. This species may be a winter resident within the Calimesa area.

The Cooper's Hawk (*Accipiter cooperii*) is listed by Audubon on its Blue List and by Remsen as Priority III. It is distributed throughout the United States in open woodlands and wood margins, with its range increasing during winter. The biological status of this species has declined throughout California with decreased breeding. The main threat appears to be destruction of lowland riparian

habitat and disturbance by humans at nest sites (Remsen 1980). The Cooper's Hawk is a year-round resident which nests in Riparian and Oak Woodlands.

The Merlin (*Falco columbarius*) is a California Species of Special Concern that is an uncommon winter migrant from September to May. It frequents open grasslands, savannas, woodlands, wetlands, and vegetation edges, feeding primarily upon small birds, mammals, and insects. It roosts in dense tree stands close to bodies of water, but does not breed in California. It wanders in search of prey.

The Peregrine Falcon (*Falco peregrinus*) is a federal Endangered species, state Endangered species, and California Protected species that is very uncommonly a breeding resident and uncommon migrant. It requires protected cliffs and ledges for cover, usually near water where the animal breeds and feeds. These conditions are, at most, only marginally present within the Calimesa area.

The Prairie Falcon (*Falcon mexicanus*) is listed by CITES (1976) as Priority II and by Remsen (1980) as Priority III. Its distribution includes the western United States in open country, deserts, and interior valleys. Biologically, its status has declined. It is an uncommon breeder in southern California, and its coastal populations have been nearly extirpated. It is expected as a periodic visitor in the Calimesa area.

The Red-shouldered Hawk (*Buteo lineatus*) occurs on Audubon's Blue List. It is widely distributed in the eastern United States. In California, it is restricted to areas west of the deserts. It occupies various woodlands and, in California, exotic tree groves. This year-round resident likely breeds in Oak and Riparian Woodlands within the planning area.

The Ferruginous Hawk (*Buteo regalis*) is a California Species of Special Concern that is an uncommon winter resident and migrant at lower elevations in grasslands and agricultural areas of southern California. It frequents grasslands, low foothills surrounding valleys, and bushy flats, eating mostly rabbits, ground squirrels, mice, amphibians, reptiles, and birds. The population levels of this species tend to follow that of rabbit population cycles. It roosts and frequently nests in open areas, usually on lone trees or utility poles. The Calimesa area is known to support this species and it has been reported frequently in the Haskell Ranch area.

The Golden Eagle (*Aquila chrysaetos*) is protected by the Bald Eagle Act (1940), is a California Species of Special Concern, is Fully Protected by the CDFG (1977, 1988, 1989), listed by CITES (1980) as Priority II, and by Remsen (1980) as Priority III. This species occurs throughout the United States and Canada, but is an uncommon resident of southern California. It inhabits deserts, open country, and mountains. Although it was once a common breeding bird in California, its biological status is declining here and elsewhere. The Golden Eagle has been reported in the vicinity numerous times, and is expected as a periodic foraging visitor within the Calimesa area.

The American Kestrel (*Falco sparverius*) is a California Species of Special Concern that once was a common resident throughout California, wintering in almost all habitats except at high elevations.



It is associated with open habitats, a variety of shrubby habitats, and various edges (ecotones) of vegetation, and preys on small mammals, birds, insects, reptiles, earthworms, and amphibians. It nest in cavities of trees, snags, rock crevices, cliffs, banks, and buildings. It may be preyed upon by larger raptors and may be expected throughout the Calimesa area.

The Mountain Plover (*Charadrius montanus*) is a California Species of Special Concern that is a declining winter resident of grasslands and plowed fields throughout the Central Valley and is reported from the San Jacinto/Perris Valley region of Riverside County. It searches open ground for large insects, avoiding high and dense cover. Plowed fields and open, scattered brush areas are utilized. It is expected occasionally within these habitats of the Calimesa area.

The Long-billed Curlew (*Numenius americanus*) is a California Species of Special Concern that may occasionally be found in upland shortgrass prairies, croplands, and wet meadows. It may utilize the Calimesa area during migrations to over-wintering grounds in the Central Valley and elsewhere. Changes in agricultural practices appear to affecting the decline of this species throughout California and it has been placed on the Audubon Society's Blue List because of its declining numbers.

The California Gull (*Larus californicus*) commonly nests at alkali and freshwater lacustrine habitats and has been an abundant visitor during the non-breeding season to inland areas, including the Calimesa area. It feeds on garbage, carrion, earthworms, and insects and is frequently found around landfills, dumps, pastures, and crop fields. Predations on breeding colonies at Mono Lake appear to be the primary factor in the decline of this species. It is expected to be a visitor in the Calimesa area.

The Yellow-billed Cuckoo (*Coccyzus americanus*) is a state Endangered species, and California Species of Special Concern that is a rare summer resident in southern California. It was formerly much more common, but is now reduced primarily due to loss of riparian habitats throughout its range. It gleans insects, such as grasshoppers, cicadas, and caterpillars, from vegetation. For cover, it requires densely foliated, deciduous trees and shrubs, especially willows. It may possibly be found in San Timoteo Canyon, or perhaps where seeps provide low-level understory vegetation beneath riparian thickets.

The Long-Eared Owl (*Asio otus wilsonianus*) is listed in Remsen (1980) as Priority II. It is found throughout the United States, except along the Gulf Coast. It occupies coastal lowland and Riparian Woodland. Biologically, it has seriously declined due to the loss of lowland Riparian Woodland habitat. It is likely to be a year-round resident in the Calimesa area and nests in Riparian and Oak Woodland. It has been observed in the Singleton Canyon area.

The Burrowing Owl (*Athene cunicularia*) is a California Species of Special Concern and that is a yearlong resident of open, dry grasslands and scrubby habitats. It eats insects, small mammals, reptiles, birds, and carrion. Rodent burrows are used for roosting and nesting. Perches are sometimes used for hunting. Conversion of grasslands for urban uses, and the poisoning of ground



squirrels are important factors in the declining numbers of this species. It may be found throughout the Calimesa area where grasslands and open scrublands persist.

The California Horned Lark (*Eremophila alpestris*) is a federal Candidate 2 species for listing as endangered or threatened. It frequents open habitats, usually where trees and large shrubs are absent, and eats insects, snails, and spiders. It takes cover in grasses, shrubs, forbs, rocks, litter, and clods of soil where it is well camouflaged. It often forms large flocks. Predations by mammals, snakes, and falcons are common. This species may be expected throughout open habitats within the Calimesa area.

The San Diego Cactus Wren (*Camphlorhynchus brunneicapillus sandiegensis*) is a federal Candidate 2 species for listing as endangered or threatened, and a California Species of Special Concern that frequents thickets and patches of cactus and other stiff-twiggged, thorny shrubs, and small trees. It forages on the ground and in low vegetation for a variety of invertebrates and plant materials. It generally nests and roosts within cavities made in cacti. It is preyed upon by domestic cats, roadrunners, snakes, and shrikes.

The Least Bell's Vireo (*Vireo bellii pusillus*) is listed as Endangered by CDFG (1977, 1988, 1989), Endangered by the USFWS (1986), and by Remsen (1980) as Priority I. Its habitat is restricted to Riparian Woodland, where, in southern California, it nests during the spring and early summer. Its populations have steadily declined in the past because of habitat destruction and Brown-headed Cowbird nest parasitism. In recent years, its numbers seem to have increased.

The California Gnatcatcher (*Poliptila californica*) was recently listed as threatened by the USFWS. It is listed by Remsen (1980) as Priority II, and by Everett (1979) as Declining. It occurs as a permanent resident in Coastal Sage Scrub vegetation throughout Riverside, Orange, and San Diego Counties, and in Baja California, Mexico. This species is uncommon and generally found in areas below 2,500 feet in elevation within Coastal Sage Scrub vegetation, including the Riversidean or Inland Sage Scrub phase found within the Calimesa area. The species reaches its northernmost range somewhere in the vicinity of Calimesa, or just south of it. Small populations of the California Gnatcatcher have been reported from the Badlands in very poor-quality habitat (relative to more coastward stands of it). Pairs of the species set up territories within sage scrub habitat in washes, and on mesas, and slopes. Coastal Sage Scrub has been rapidly converted to urban uses in recent decades, and along with increases in cowbird parasitism, have caused the rapid decline in the numbers of this species. California Gnatcatchers possibly occur within Riversidean Sage Scrub habitat where ever it occurs within the Calimesa area. However, the habitat quality of the sage scrub in the Calimesa area is very marginal for the California Gnatcatcher. Only scattered, small populations would be expected, if they are present. Detailed surveys will be required to establish their presence or absence, and distribution and census, if present.

The Loggerhead Shrike (*Lanius ludovicianus*) is a federal Candidate 2 species for listing as endangered or threatened. It is a resident throughout much of California and utilizes open habitats of scattered shrubs, trees, posts, fences, utility lines, and other perches. It prefers open-canopied

valley foothill woodlands and foothill woodlands with sparse trees and shrubs, but may use open croplands and vegetation edges. It eats mostly large insects, but takes small mammals, amphibians, reptiles, fish, and carrion. It frequently skewers its prey onto a thorn, sharp twig, or wire barb.

The Yellow Warbler (*Dendroica petechia*) is listed by Audubon (Tate 1980) as a Species of Special Concern and by Remsen (1980) as Priority II. This species was formerly widespread in California where it breeds in riparian habitats. It has declined biologically in many areas due to habitat destruction and increases in Brown-head Cowbird nest parasitism. The Yellow Warbler is a summer resident that is expected to breed in Riparian Woodlands throughout the Calimesa area.

The Yellow-breasted Chat (*Icteria virens*) is listed by Remsen (1980) as Priority II. It formerly bred more widely in the dense Riparian Woodland of California. Although it was once fairly common in riparian habitats in the state, it now is much less common, especially in southern California where riparian habitats have been greatly reduced in areal extent.

The Rufous-crowned Sparrow (*Aimophila ruficeps*) is a federal Candidate 2 species for listing as endangered or threatened. It is a resident of sparse, mixed chaparral and Coastal Sage Scrub habitats throughout northern and southern California and southward into Baja California. It forages on the ground in herbs and litter, beneath shrubs and eats seeds, insects, spiders, and grasses. This secretive animal seeks cover in grasses, forbs, shrubs, and rocks within open shrubland and chaparral habitats. It breeds and feeds on steep, dry, plant-covered hillsides with scattered rock outcrops and shrubs. This species may be found throughout most of the Calimesa area where steep slopes and brush occur.

The Bell's Sage Sparrow (*Amphispiza belli*) is a federal Candidate 2 species for listing as endangered or threatened. It is an uncommon resident in the Calimesa area where it feeds on insects, spiders, and seeds from the ground and low foliage of shrubs. It seeks cover in dense stands of chaparral and scrub habitats during the breeding season, but prefers more open shrub habitats in winter.

The Tri-colored Blackbird (*Agelaius tricolor*) is a federal Candidate 2 species for listing as endangered or threatened and a California Species of Special Concern that is mostly a resident of California. It breeds near fresh water, especially where emergent wetlands plants, such as dense cattails, tules, and thickets of willow, blackberry, wild rose, and other tall herbs. It sometimes roosts in trees near wetlands. Mammalian predators and raptors prey upon this species and its numbers are declining. Ponds, seeps, and low-flow areas of streams that support cattails or tules within Calimesa may support this species.

### **Sensitive Mammals**

The Ornate Shrew (*Sorex ornatus*) is a California Species of Special Concern found in the southern two-thirds of California in valley foothill riparian areas, woodlands, chaparral, grasslands, and emergent wetland vegetation. It feeds on insects in micro-habitats where moisture is present, such as under logs, rocks, and in litter. It may be present throughout the Calimesa area.



The Spotted Bat (*Euderma maculatum*) is a California Species of Special Concern and is considered to be one of the most rare North American mammals. Not much is known about this species. It is a solitary species, found mostly in foothill, mountains, and desert regions of southern California, feeding on moths. It apparently prefers to roost in rock crevices, but is occasionally observed in caves and buildings. Cliffs are the optimal habitat for this species. It feeds over water and along washes and may move down from mountain areas to lower elevations in autumn. The Calimesa Plan Area may support this species along washes.

The Townsend's Big-eared Bat (*Plecotus townsendii*) is a federal Candidate 2 species for listing as endangered or threatened, and a California Species of Special Concern. It may be found throughout California, except for the highest Sierra crest. It is most common in moderately moist (mesic) habitats, feeding on moths and beetles. It requires caves, mines, tunnels, buildings, or other man-made structures for roosting. It gleans food species from brush and trees along habitat edges. It forages along with other bat species. This species is especially sensitive to human disturbances, sometimes abandoning a roosting site after a single human intrusion. All known nursery colonies in limestone caves in California have been abandoned, apparently due to such intrusions. The entire Calimesa area may support foraging grounds or breeding sites for this species.

The California Mastiff Bat (*Eumops perotis californicus*) is a federal Candidate 2 species for listing as endangered or threatened, and is a California Species of Special Concern. It is an uncommon resident of many open, semi-arid habitats, including deciduous woodlands, coastal sage scrub, annual and perennial grasslands, chaparral, and urban environments. It feeds on insects in flight. Cover for this species includes cliff faces, high buildings, trees, and tunnels. Tight rock crevices are used for roosting. It is the largest native North American bat and possibly occurs within the Calimesa area where extensive open habitats occur with rock outcrops and buildings.

The Black-tailed Hare (*Lepus californicus bennettii*) is a federal Candidate 2 species for listing as endangered or threatened. It is found throughout the state, except at the highest elevations, where open shrublands occur, such as in washes and open chaparral. It forages on plants, often in open areas among patches of heavier shrublands. Edges between vegetation types are especially suitable. It is preyed upon by coyotes, eagles, horned owls, rattlesnakes, and gopher snakes. It has been observed in grassland, riparian, and oak woodland/savannas within the planning area, and may be located throughout the area.

The Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*) is listed by the CDFG (Williams 1986) as Highest Priority and a Species of Special Concern, but the USFWS as a Category II species for possible listing as Threatened or Endangered. This small pocket mouse is restricted to the Los Angeles Basin, from Burbank and San Fernando on the northeast, and Cabazon, Hemet, and Aguanga on the east and southeast. It occupies habitat of lower elevation grasslands and coastal sage scrub associations where soils are sandy. Although the population status of this species is poorly known due to lack of information, it is believed that only small populations of this sensitive subspecies persist. Much of its former habitat in the Los Angeles Basin is now uninhabitable due to agricultural practices and urbanization. This species has been captured in the San Jacinto Valley



on the CDFG San Jacinto Wildlife Reserve by University of California researchers (Personal communications, P. Kelly to R.D. Friesen, 1991) and is known from the Massacre Canyon Wash area of the Badlands (PSBS 1990). It likely is present within the City of Calimesa.

The Stephens' Kangaroo Rat (*Dipodomys stephensi*) is federally listed by the USFWS (1986) as Endangered and by the CDFG (1977, 1988, 1989) as Threatened. It is restricted to the area between, and including, Temescal Canyon and the San Jacinto Valley, and several interior valleys in northern San Diego County. Its populations have never been abundant. The Stephens Kangaroo Rat occupies barren, open areas on lower slopes and flats adjacent to open Riversidean Sage Scrub, where the grade is less than 30 percent. Its biological status has been declining due to habitat loss from agricultural and urban development. It is present throughout the Badlands south of Calimesa, but appears to be absent within the Calimesa area.

The San Bernardino Merriam's Kangaroo Rat (*Dipodomys merriami parvus*) is a federal Candidate 2 species for listing as endangered or threatened. This kangaroo rat is a rediscovered remnant of the subspecies which was more-widespread at the turn of this century. The species to which this kangaroo rat belongs is the most widespread kangaroo rat in North America. The San Bernardino subspecies is known only from a few localities that have fine to coarse sandy soils. It forages for seeds among sand grains and may eat leafy vegetation in spring. It burrows beneath shrubs on flats or slopes with sparse to moderate canopy coverage. It is preyed upon by owls, snakes, gray foxes, coyotes, and badgers. This species may be present in sandy soils in the planning area along washes.

The Southern Grasshopper Mouse (*Onychomys torridus*) is a federal Candidate 2 species for listing as endangered or threatened, and a California Species of Special Concern. It lives in arid shrub habitats, such as coastal sage scrub, mixed chaparral with friable soils. It feeds almost entirely upon arthropods, such as scorpions, crickets, caterpillars, beetles, and moths. Predators likely include raptors, snakes, and carnivorous mammals. The species is considered beneficial because it eats potentially harmful foods.

The Desert Woodrat (*Neotoma lepida intermedia*) is a federal Candidate 2 species for listing as endangered or threatened, and is a California Species of Special Concern. In southern California, the species is found in mixed chaparral, coastal sage scrub, and most desert habitats where rocks are abundant. It eats various parts of plants, including parts of live oaks, chamise, and buckwheat. It constructs a stick house using various objects available, including natural objects, such as rocks and twigs, and man-made objects it may find. It is largely dependent upon prickly pear cactus for water in many parts of its range. It prefers moderate to dense canopies of shrubs, where rocks are abundant, especially in rock outcrops and slopes. The species is the prey of snakes, owls, and predatory mammals.

The Badger (*Taxidea taxus*) is a California Species of Special Concern found as a permanent resident in California, especially in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. These animals eat rats, mice, ground squirrels, pocket gophers, reptiles, insects, eggs, birds, and carrion, depending upon the season and prey availability. Most of the habitats, including

the grasslands areas of Calimesa are suitable habitat for this species. They are threatened by ground squirrel poisoning and predator control programs. One badger burrow was reported by Dames and Moore (1988) within the planning area.

## **REGULATORY FRAMEWORK FOR BIOLOGICAL RESOURCES**

State, federal, and local laws and regulations exist to protect wildlife and plant resources. Compliance with federal, state, and local regulations may be required at various stages in the environmental planning process. Compliance with federal regulations becomes necessary when a proposed project involves a federal action, including permits, grants, licenses, or other forms of federal authorizations or approval which may result in construction. The impacts associated with a proposed federal action must be analyzed pursuant to the National Environmental Policy Act (NEPA). All general plan amendments, specific plans, and tentative tract approvals require an assessment of impacts on biological resources pursuant to the California Environmental Quality Act (CEQA). In addition, local regulations often require an assessment of impacts when: (1) significant biological resources, such as rare, threatened, or endangered species, riparian habitat, oak woodland, or other large trees are affected; (2) sensitive communities of special concern as reported by the California Department of Fish and Game's Natural Diversity Data Base are present; or (3) the project is located within or affects wildlife movement corridors.

The following section summarizes the major federal, state, and local laws that guide the planning process with respect to biological resources.

### **National Environmental Policy Act (NEPA)**

Whenever a branch of the federal government is involved with a project, the provisions of the National Environmental Policy Act apply. The goals of NEPA with respect to biotic resources include: the attainment of the widest range of beneficial uses of the environment without degradation; preservation of the diversity of natural aspects of the environment; and achievement of a balance between population size and resource capacity. Federal involvement can include actions that require federal funds (such as infrastructure highways or block grants), federal permits (for example, permits pursuant to Section 404 of the Clean Water Act, or Section 10(a) of the Endangered Species Act), or if federal lands, such as national forest lands, are involved.

If the project is not subject to categorical exclusion under NEPA, the lead agency may prepare an Environmental Assessment (EA) to determine if an Environmental Impact Statement (EIS) is necessary (the lead agency is that federal agency with the most involvement in the project, or the first agency to be involved). An EA can be avoided if there is a decision to proceed with the preparation of an EIS. If a finding of no significant impact (FONSI) is made on the EA, the proposed action may proceed without further federal environmental analysis.

If the EA does not result in a FONSI, an EIS must be prepared. A notice of intent to prepare an EIS is published in the Federal Register to allow other agencies and the public to review the project. Federal, state, and local agencies, and the public are invited to help determine the scope and issues



which should be included in the EIS (scoping process). Based upon issues raised during the scoping process, a draft EIS is prepared that outlines the project, possible impacts, and alternatives to the project which may have less impact.

The draft EIS is reviewed by government agencies and the public, and comments concerning the impacts and alternatives are elicited. All comments are reviewed and addressed in the final EIS, which is submitted to the U.S. Environmental Protection Agency (EPA) and other federal agencies concerned with the project for review and comment. The lead agency renders a record of decision that includes the decision, alternatives, and practical means to avoid environmental harm. Upon approval of the final EIS, the project may proceed.

### **Section 404 of the Clean Water Act**

The purpose of Section 404 of the Clean Water Act is to maintain the integrity of United States waters through the control of discharge of fill materials. Areas that may meet the definition of "waters of the United States" and lie within Calimesa include San Timoteo, Singleton, Burns, Garden Air, and Covington Canyon streams, and associated tributaries, and all other "blue line" areas as indicated on USGS topographic maps. Also included is habitat for migratory birds that cross state lines, habitat used by species covered by the Endangered Species Act, and waters used for recreation by out-of-state visitors. Most of the waters of the United States that occur within Calimesa are located on private and public lands, and either convey water or are moist, for at least part of the year.

Section 404 states that no dredge or fill material may be discharged into aquatic ecosystems unless no adverse effects will result, and that there should be no discharge of dredge or fill material into wetlands if there is an alternative that would have less environmental impact. Adverse effects include those that jeopardize endangered or threatened species or critical habitat under the Endangered Species Act of 1973. Section 404 guidelines also recognize that the loss of wetlands is the most significant environmental impact, and that the loss is irreversible.

Authority for Section 404 is delegated to the U.S. Army Corps of Engineers (ACOE). Pursuant to Section 404(b)(1). Persons who wish to add fill to a United States water must file an application with ACOE. Information required on the application is fairly general and does not require detailed plans, although the entire project and all planned phases must be addressed in the application. The primary objective of the application is to disclose how much fill will be placed, where fill will be placed, and how and why it will be placed in United States waters. Wetland-dependent wildlife species must also be reviewed in consultation with the U.S. Fish and Wildlife Service (under Section 7 of the federal Endangered Species Act). Other federal or state agencies may ultimately be involved with the process (for example, waters that fall under the California Department of Fish and Game (CDFG) jurisdiction pursuant to Section 1603 of the Fish and Game code).

The ACOE prints public notification, which is followed by a public comment period. All public comments are sent to the applicant. The applicant must also respond to requests from the ACOE for additional information. After receipt of a complete application, the ACOE prepares an Environmental Assessment, pursuant to the provisions of the National Environmental Policy Act.



### **Federal Endangered Species Act of 1973**

The Endangered Species Act (ESA) states that federal agencies must insure that their actions will not jeopardize the existence of threatened or endangered species, or result in the destruction or adverse modification of critical habitat of such species. In the City of Calimesa, listed species include the (forthcoming). In addition to the habitats of the listed species, several more plant and animal species in Calimesa which are candidates for listing also receive recognition in federal actions. The federal list is updated yearly and species that occur in Calimesa may be listed in the future. Therefore, the City should attempt to update its regional list of endangered and threatened species yearly to remain current.

The U.S. Fish and Wildlife Service (USFWS) is delegated the responsibility to ensure that the provisions of the ESA will be carried out. Section 7 of the ESA requires consultation with USFWS when a federal action may adversely affect a listed species to insure that the proposed action will not jeopardize the continued existence of such species (as explained under NEPA above, "federal actions" include private projects that involve federal funding, agency involvement, or federal lands). A biological assessment is submitted to the USFWS for review. The USFWS will render a "biological opinion" as to the effects of a proposed action on listed species or their habitats. The biological opinion also considers "reasonable and prudent" alternatives to the project that would avoid jeopardizing listed species. Those proposing the action may request a "draft biological opinion" in order to work with the USFWS in developing acceptable alternatives.

Section 9 of the ESA prohibits the "take" of a federally listed endangered species. The term take is defined as direct loss of endangered species (death) or loss through habitat destruction. A project that may include the taking of listed species must be filed with the USFWS prior to beginning the project. The applicant must provide documentation of impacts associated with the taking of listed species, steps to minimize and mitigate impacts, alternative actions to avoid take, and reasons why alternatives are not being used.

After public review of the project and its effects on endangered or threatened species, a permit may be granted pursuant to Section 10(a) if take is incidental. Incidental take is defined as removing or destroying a species or its habitat when such taking is incidental to, and not the purpose of, otherwise lawful activities. The applicant must show that the project minimizes and compensates, to the maximum extent practicable, all impacts on the listed species. The applicant must ensure funding for proposed conservation plans, and must ensure that the incidental take of the listed species does not reduce the likelihood of the survival and recovery of the species in the wild.

### **California Environmental Quality Act (CEQA)**

CEQA applies to any government action within the state of California. This can include activities directly undertaken by a government agency, projects financed in whole or in part by a government agency, or private actions which require approval from a government agency under other regulations (such as a Section 404 permit pursuant to the Clean Water Act). If it is found that the project is not subject to the provisions of CEQA, a notice of exemption is prepared and the action can proceed

unaltered. If the agency involved finds that no significant impacts will occur, the agency prepares a negative declaration and the project can proceed as proposed. If a proposed action may cause significant damage on biological resources, CEQA requires the preparation of an Environmental Impact Report (EIR).

CEQA also requires review of general biotic resources, endangered species, and sensitive species that may be affected by an action. Section 15380 of CEQA defines a plant or animal species as endangered when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, or predation. Species are presumed to be rare, threatened, or endangered as listed by the State of California in Sections 670.2 or 670.5, Title 14, of the California Administrative Code, or federally rare, threatened, or endangered pursuant to the Federal Endangered Species Act, Title 50, Code of Federal Regulations, Sections 17.11 or 17.12. Section 15386 of CEQA names the California Department of Fish and Game (CDFG) as a "trustee agency" having jurisdiction over endangered or threatened plants and animals. Under CEQA, state agencies must consult with CDFG if projects are likely to jeopardize the continued existence of listed plants or animals, and CDFG must provide reasonable and prudent alternatives to avoid the problem (Fish and Game Code Sections 2090 and 2091). A complete list of all state and federal listed endangered species known to occur or have suitable habitat in Calimesa is included in Table 4-1.

The EIR must analyze the effects of a proposed activity on biological resources. Alternatives to the proposed action must be explored, as well as mitigation measures to minimize or compensate for impacts to biological resources.

### **California Department of Fish and Game Code Section 1603**

Section 1603 of the Fish and Game code states that it is unlawful for any person to divert or obstruct the flow, or to alter the bed, channel, or bank of any river, stream, or lake without notifying the CDFG of such action. Areas in Calimesa subject to the CDFG 1603 agreements are likely to include San Timoteo, Singleton, Burns, Garden Air, and Covington Canyons, their associated tributaries, and all other "blue line" areas as indicated on USGS topographic maps.

After notification of such activity, the CDFG will inform the applicant of any fish or wildlife resource that may be adversely affected by the alterations. This notification will also include measures that the CDFG feels are necessary to protect the fish and wildlife. The persons proposing the action may request an onsite investigation by the CDFG, or the CDFG may find an onsite investigation necessary before proposing measures to protect fish and wildlife.

It is unlawful to begin projects affected by this section of the Fish and Game code until CDFG has found that fish and wildlife will not be adversely affected, or until CDFG proposals, or those of arbitrators, have been incorporated into the project. If CDFG fails to respond to notification of project plans within 30 days, the project may proceed. Projects that involve routine maintenance or operation of water supply, drainage, flood control, or waste treatment facilities do not require CDFG notification once the initial notification procedures have been completed, unless the activities covered by the original notification change substantially. Also, the provisions of Section 1603 are not



applicable to emergency work necessary to protect life or property, but CDFG must be notified of emergency actions within 14 days of the action.

Projects falling under 1603 jurisdiction may also require Section 404(b)(1) permits, as discussed above, and may result in consultation with the USFWS pursuant to Section 7 of the Endangered Species Act of 1973, or coordination pursuant to Section 9 and Section 10 of the Endangered Species Act.

### **California Fish and Game Code and Endangered Species Act**

The California Endangered Species Act (CESA) generally applies to the same listed species as the federal ESA (FESA), although some differences in the lists do occur. The state law prohibits taking of state-listed and candidate species. Unlike the federal law, the Fish and Game Code does not provide for incidental taking of listed species or the preparation of habitat conservation plans. However, the Code does authorize the CDFG to approve management agreements that serve a similar purpose:

Section 2018 (part of the CESA) allows the Department to "authorize individuals, public agencies, universities, zoological gardens and scientific and educational institutions to import, export, take or possess (listed or candidate) species for scientific, educational or management purposes"; and

Section 2835 allows the Department to authorize take of a listed or candidate species in areas covered by an approved Natural Communities Conservation Plan (NCCP).

With respect to prohibition of take, the CESA differs from the FESA in three ways:

The state defines "take" as "to hunt, pursue, catch or kill" or attempt the same. Unlike the federal definition, the terms "harm" or "harass" are not used in the state code. However, activities that would trigger a "jeopardy" determination under the state consultation process are essentially the same as those that would constitute "harm" or "harassment" under the federal law.

Unlike the federal law, the state prohibition on taking applies to species proposed for listing, as well as to species listed as threatened or endangered. When the Fish and Game Code Commission designates a species as a "candidate for listing", that species receives the full protection of the CESA for a one-year period during which the final determination on listing is made.

Section 2082 and 2835 authorize the CDFG to approve management agreements and permits that serve a similar purpose as a Section 10(a) permit under the FESA. The NCCP under Section 2835 is similar to the Multi-species Habitat Conservation Plan under federal law.



NCCPs differ from Section 2081 agreements primarily in that they are intended to conserve, protect, recover, and enhance species and ecosystems before they are in jeopardy of extinction. This planning process is intended to preserve local and regional biological diversity, reconcile urban development and wildlife needs, and meet the objectives of both the FESA and CESA. To this end, the US Fish and Wildlife Service has placed the California gnatcatcher under the statutory regulation of the state NCCP program through species rules that are allowed by the FESA.

Section 1913 of the Fish and Game Code treats listed plant species differently from listed animal species. Prior to the taking of listed or candidate plant species, the CDFG must be notified 10 days in advance of taking to permit the Department to collect seeds or transplant these plants at the Department's discretion.

## SCENIC HIGHWAYS

The City of Calimesa is located between the San Gorgonio Pass and Yucaipa Valley. Major physiographic features in the San Gorgonio Pass area include the San Gabriel and the San Bernardino Mountains northwest and north of the site, the rugged San Timoteo Badlands, and the flat, expansive San Jacinto Valley southeast of the City. Mount San Gorgonio and Mount San Jacinto are the tallest physiographic features in this portion of the inland valley and are positioned on either side of the San Gorgonio Pass. Interstate 10 runs through the San Gorgonio Pass and connects the Los Angeles Basin with the Coachella Valley and the inland desert areas.

Interstate 10 is the major transportation route and provides uninterrupted views of the surrounding rolling terrain and valley floors, as well as the prominent but more distant San Bernardino and San Jacinto Mountains. This regional transportation route also provides views of Yucaipa, Calimesa, and Beaumont.

Because of the low density development in the area, most streets provide views of the surrounding mountains and hillsides.

## VISUAL RESOURCES

The City of Calimesa is characterized by foothills in its eastern areas and nearly level topography in its north and central areas, gently sloping towards the San Timoteo Creek in the southwestern areas of the City. Vegetation consists of chaparral on north-facing slopes, sage-scrub on south-facing slopes; oak and riparian woodland along canyon bottoms and annual grassland, open range, and agricultural fields on much of the City's area. Local topographical features include rolling hills, sloping plateaus, and flat valley bottoms.

The scenic quality of Calimesa is a combination of the diversity of landscape types contrasted with the surrounding environment. The City of Calimesa may be characterized by a pastoral setting west of Interstate 10, single family neighborhoods in the north and central areas of the City (east of Interstate 10), estate homes within the Calimesa Hills in the eastern portion of the City, and rural residences and agricultural uses in the southeast portion of the City. The pattern of ridges divides

the area into distinctive visual units, serves as a backdrop to many on-site views, and provides panoramic vistas of the San Bernardino and San Jacinto mountain ranges.

The City has a number of visual units with a distinctive landscape character and topography. Each visual unit is described below in terms of its location within the City, viewshed boundaries, and topographic features:

*San Timoteo Canyon* - This visual unit is located in the northwestern portion of the City. Characterized by a long, broad corridor bounded by steep ridges bordering the San Timoteo Creek, the San Timoteo Canyon is generally enclosed by eastern ridgelines, although a small series of valleys provide viewsheds towards Interstate 10 and the San Bernardino Mountains. The San Timoteo Creek area is characterized by open grassland, agricultural land, and riparian vegetation along the creek. San Timoteo Canyon Road and the Southern Pacific Railroad Tracks form the City's western boundary and the central portion of this visual unit.

*Central Valleys* - This largest visual unit consists of four east-west trending valleys, and is separated by distinct ridges stretching from a rolling or gently sloping plateau adjacent to the Calimesa Hills. It continues across the City past Interstate 10, and extends to the San Timoteo Canyon area. The ridges are divided by intermittent stream channels draining into the canyons. Garden Air Wash, the major stream channel, drains the Calimesa Hills and flows west through the Calimesa Golf and Country Club.

Vegetation in the central valleys consist of open grassland and riparian vegetation along the valley bottoms and flatter eastern slopes, and chaparral and sage-scrub along the steeper slopes and small ravines. Viewsheds from the valley floor are oriented towards the ridgetops to the east and west. The Southern California Edison easement, which forms the southwest portion of Calimesa's corporate boundary, follow the ridge between two of the valleys, and is the only intrusion into this natural setting.

*Northern Plain* - Located in the northwest and northeast areas of Calimesa, this visual unit is described by open pasture land west of Interstate 10 and a commercial corridor and single family residential developments to the east. Calimesa Channel which originally was an irrigation source for agricultural properties, rolls through the northcentral portion of the City, and continues as a natural drainage course west of Interstate 10. The northern plain provides views of western Calimesa and southern Riverside County areas, overlooking a series of ridges and ravines.

*Northern Plateaus and Ravines* - This visual unit, located at the northwestern City boundary is comprised of higher plateaus, and scattered scrub-covered ravines that slope to the west within a pastoral setting. Higher elevations allow for panoramic views of the Yucaipa and San Jacinto valleys, San Bernardino and San Jacinto Mountains, and the surrounding communities.



*Northern Valley* - This visual unit, adjacent to the northern plateaus and ravines, connects to San Timoteo Canyon southwest of Calimesa. The northern valley is similar in topography and vegetative types to the Central Valley, but is more enclosed.

## **CULTURAL AND HISTORICAL RESOURCES**

### **Ethnographic Resources**

Early hunting cultures were the first to inhabit the Southern California region, followed by Archaic Stage populations emphasizing plant resources for subsistence. Hunters and gatherers developed and ultimately persisted into historic times. The Calimesa area was occupied at the time of Mexican contact by the Wanakik (or Pass Cahuilla) clan who inhabited the San Gorgonio Pass area. Artifacts, research and the oral tradition suggest that the Cahuilla people lived in villages of about 100-200 persons located in canyons beside the San Gorgonio Pass. Typically, Wanakik villages consisted of individual family dwellings, the chief's house, a ceremonial house, a men's sweathouse, and several granaries.

The diet of the Wanakik consisted of acorns, pinon nuts, cactus bulbs, mesquite and screw bulbs. Rodents, reptiles, fowl, and large game animals were also hunted, trapped and eaten. Water supplies were obtained from springs or hand-excavated walk-in wells. The Wanakik influence remained intact until the Mexican exploration and settlement of the San Gorgonio Pass area in the late 18th century.

### **Cultural and Historical Influences**

The San Diego coastal region and the California deserts are two historically significant areas which helped shape Calimesa and the San Timoteo Canyon area. The San Gorgonio Pass served as a major transportation route and was subject to a variety of cultural influences. In the late 1500's, Spanish explorers entered California through San Diego and established missions in the area. Modern history of the Calimesa and San Timoteo Canyon area began in 1769 with the establishment of the Spanish mission in the town of Anza, 38 miles southeast of Calimesa. Captain Juan Bautista de Anza led a small party through the San Timoteo Canyon in 1774. Colonists and missionaries continued to use Anza's route during the Spanish occupation of California.

During the subsequent Mexican period, the San Timoteo Canyon area was divided into several sizeable land grants. James (Santiago) Johnson owned two of these grants, including the San Timoteo Rancho and the tract between San Jacinto and San Gorgonio. Settlement and growth in the San Timoteo Canyon area occurred after Mexico's cessation of California to the United States in 1847.

Exploration and surveys of the San Gorgonio Pass were first made in 1853 to determine the feasibility of developing a rail line which would extend west through the area and continue to the Pacific Ocean. The Butterfield Overland Mail route, freight, stage and other mail lines crossed the San Gorgonio Pass utilizing Bradshaw Road between 1858 and 1861. The Stagecoach Trail extended south from Redlands into Cherry Valley following San Timoteo Canyon Road, and Woodhouse Road



to Singleton Canyon, then descending into Cherry Valley using Orchard Street and Nancy Avenue. Horseback riders continue to refer to this trail as Stagecoach Road today.

In 1862, the discovery of gold in La Paz, Arizona spurred the development of Bradshaw Road in San Timoteo Canyon. The Southern Pacific Railroad completed its railroad line from Los Angeles through the San Geronio Pass in 1876. This led to the creation of agricultural and land development opportunities in the area, and the establishment of Riverside County in 1893. Agricultural operations continue in the western and southeastern portions of Calimesa, and Riverside County areas west of the City.

In 1910, the Redlands-Yucaipa Land Company subdivided the Yucaipa Valley. The major transportation thoroughfare at the time was Fifth Street in Redlands, which continues as Sand Canyon through the Crafton Hills and Yucaipa. In 1915 and 1916, the dirt highway extending from Beaumont to Yuma was overlain with concrete. Fifteen years later, the road was completed between Redlands and Beaumont through Calimesa, and residents participated in a "Road-Day-O" celebration. The route was later named Highway 99 and is now Interstate 10. Following its completion, commercial activities in the area developed and Calimesa began to establish a separate identity from Yucaipa.

In mid-1929, nearly 100 residents attended a meeting and decided to apply for their own post office and to stage a name contest for their community. Calimesa, which came from the state's prefix and the Spanish word "mesa" meaning "table lands" was chosen out of over 100 entries. The community's first post office was located within the grocery store at Avenue K and Calimesa Boulevard, and established the Calimesa community.

The Calimesa Improvement Association, Inc. was formed in 1940. Volunteers constructed a community center at the corner of Bryant and Avenue H, which the Redlands-Yucaipa Land Company had designated as a park site. The South Mesa Water Company purchased the land for use as a well site, and allowed the Calimesa Improvement Association to hold community activities there.

In 1962, the Calimesa Improvement Association became the Calimesa Chamber of Commerce, with the purposes of promoting Calimesa, providing community service and acting as a sounding board for residents concerns. The Chamber became instrumental in forming County Service Area 46 (a lighting district) and again forming County Service Area 74 (parks and recreation services) in 1970.

Fire protection for the Yucaipa Valley was provided by the California Department of Forestry at the Avenue A station in Yucaipa before 1949. Calimesa residents wanted additional fire protection and formed a Volunteer Fire Department in 1949. Fire protection operations were housed in a garage behind Signal Gas Station on Calimesa Boulevard. Fourteen years later, the Division of Forestry accepted the property on Park Avenue from the Chamber of Commerce and the fire station was relocated to its present Park Avenue address.

Following the sale of the Shutt Ranch and Singleton Ranch for development, and the completion of the H.N Wochholz Wastewater Treatment Plant, Calimesa's rapid population growth swept through the Yucaipa Valley. As the community of Calimesa became more established, efforts for incorporation evolved and Calimesa became a City in 1990.

### **Historic Resources**

The National Register of Historic Structures does not include any historic structure in Calimesa. The California Inventory of Historic Resources has designated Haskell Ranch as a historic site. Haskell Ranch (formerly known as San Timoteo Rancho) illustrates the architectural significance of a late 19th and early 20th century dairy ranch. The ranch and many of its structures are presently in use. Historic ranch structures on site include a blacksmith shop, residence, horse barn, bunkhouse, ranch house, milk house, old adobe, residence of owner James Haskell, hay barn, and a feed mixing shed.

Other historical structures include an Indian Village, the Livatt House, the Old Post Office, the Humphrey House, a stage station stop located in a private residence at the Singleton Road terminus, and the Singleton House.

The Duff Weaver House was recorded by William Blake, geologist of Parke Party, in 1853. Duff Weaver was the brother of mountainman Paulino Weaver. Weaver was an 1840's settler of the San Gorgonio Pass and prevailed upon Cahuilla chief Juan Antonio to capture Juan Antonio Garra, a Cupeno Indian, at his stronghold.

### **Archaeological Resources**

Records at the Eastern Information Center of the California Archaeological Inventory at the University of California-Riverside (UCR) and field surveys indicate that four archaeological sites have been identified in the Calimesa area.

The first site is on the north side of San Timoteo Canyon, along a small ridge approximately 200 meters north of San Timoteo Creek. The site, which was first recorded in 1982, consisted of four pottery sherds, two small fragments of burned bone, and an unshaped bifacial metate. Although the pottery sherds were collected at the time of the first survey, neither the burned bone or the metate were found in the subsequent archaeological survey. The southern portion of the site has been disturbed by plowing and line placement.

The second site is located north of San Timoteo Creek, in a small cove between two ridges, immediately east of Burns Canyon. Surface investigations and a test excavation unit yielded 93 pottery sherds, a fragment of a pottery making anvil, two manos, a core tool, a hammerstone, several flakes, and one Elko Eared chalcedony projectile point. The site was described on an 1871 General Law Office survey map as a "small indian village." In the absence of a refuse heap and a limited range of materials, the site may have functioned as a Cahuilla camp. Agricultural operations and the construction of a small reservoir have disturbed the site.



The third site consists of four bedrock mortars located in two conglomerate boulders on a narrow, southwest trending ridge near the floor of San Timoteo Canyon. The boulders are presently decomposing, and half of one of the mortars has broken off.

A fourth site was investigated during a field survey as a likely area for prehistoric use. Located along a ridge about 500 feet northwest of a seasonal creek flowing southwest into San Timoteo Canyon, the site consists of a small bedrock milling site consisting of three bedrock mortars on a single boulder. Although the boulder remains intact, the general area has been disturbed by residential development.

### **Paleontological Resources**

A fossil is the hardened remains or traces of plant and animal life of some previous geologic period which has been preserved in rock formations in the earth's crust. Paleontological investigations for the San Timoteo Badlands area, including Calimesa, were conducted by Dames and Moore in 1987.

The research revealed that the area contains sediments of the Plio-Pleistocene ice age, referred to as the San Timoteo Formation. These are overlain by fine-grained (Quaternary) sediments, as found on Haskell Ranch and Shutt Ranch. The San Timoteo Formation and overlying sediments, consisting of claystones, siltstones, shales, sandstones, gravels, and conglomerates are known to be highly fossiliferous and have produced abundant and diverse flora and faunal remains. Thus, the San Timoteo Badlands area and the western portion of the City have a high potential to produce significant paleontological resources.

## **OPEN SPACE AND RECREATION**

The Open Space and Recreation issues deal with existing open spaces, vacant land, and parks and recreational facilities in the City of Calimesa. Vacant land refers to undeveloped privately owned land or publicly owned land left as open space. Open space areas include areas unsuitable for development due to unstable ground conditions, and areas that are undeveloped to comply with existing land use controls such as parks, building setback areas, utility easements, and school playing fields.

The City of Calimesa largely retains its rural character, and more than one-half of the City's land area consists of undeveloped plateaus, valleys, and ridges. The major open space area is found west of Interstate 10 within the Oak Valley Specific Plan area. This area encompasses a total of 6,405 acres and is comprised of both the Live Oak Canyon area in northwest Calimesa and unincorporated Riverside County areas. The Specific Plan area is generally bounded by Interstate 10 on the northeast, Riverside County areas on the west, the Tract between San Geronio and San Jacinto, the Southern Pacific Railroad, San Timoteo Canyon Road, and the Southern California Edison easement on the southwest, the City of Beaumont on the south, and the community of Cherry Valley on the east. Approximately 4,100 acres of the Specific Plan area is within the City of Calimesa and currently accommodates a few dairy ranches, but is predominantly vacant land.







Other open space areas within the City include: the Southern California Edison easement, agricultural land, the Calimesa Channel and Creek, Calimesa Golf Course, and other unimproved stream courses. Vacant land consists of approximately 6,932 acres, as shown in Exhibit 4-5.

Hillside areas and corresponding ridgelines, slopes, and valleys occupy the City's eastern area, and constitute major visual resources. These areas contain agricultural operations, estate homes, and undeveloped land. The City has formulated Hillside Development Guidelines for the purposes of evaluating proposed hillside development. Implementation of the Guidelines ensures protection of public health, safety, and welfare and emphasizes conservation of the terrain.

## **Parks and Recreation Facilities**

### **City Parks**

Recreational facilities in the City of Calimesa are limited to a golf course, and a multipurpose Senior Center. These facilities occupy approximately 109.3 acres. They are discussed below with these locations shown in Exhibit 4-6.

- The Norton Younglove Multipurpose Senior Center is a 1.3-acre parcel located at 908 Park Avenue at its terminus with Erwin Street, adjacent to City Hall. Operation of the Senior Center serves two purposes: 1) it ensures Calimesa seniors access to available community resources and, 2) it assures seniors that continuing efforts will be made to assist them in living independently in the community.

The senior center has a conference room, arts and crafts room, and a recreation room and kitchen. It also houses the Calimesa Library Station. The facility's activities include a nutrition center, health check-ups, a line dancing class for adults, and an exercise dance class for children. Use of the Senior Center is available for other age groups and programs, although senior programs and activities are given priority.

- The Calimesa Golf and Country Club is a 108-acre, semi-private commercial facility on Third Street between the Sandalwood and the Buena Mesa single family residential neighborhoods. This recreational facility provides an 18-hole public golf course and clubhouse. Aside from Calimesa residents, it serves the neighboring City of Yucaipa and community of Cherry Valley.

In addition to these recreational facilities, private school playground facilities at the Mesa Grande Seventh Day Adventist Academy provide recreational facilities for students. This 12-acre educational facility includes a sports track, but is not open for public use. There are no public schools in the City which may provide additional recreational opportunities. The lack of variety and public, special interest recreational facilities available to Calimesa residents indicates that the recreational facilities in the area need to be expanded.



### **Bikeways and Trails**

The City of Calimesa maintains a connecting walking trail system, multi-purpose trails, and horse trails, as shown in Exhibit 4-7. There are three east-west connecting trails: along County Line Road connecting the Calimesa Hills with San Timoteo Canyon; along Avenue L linking the Calimesa Golf and Country Club with the San Timoteo Canyon area; and along Singleton Road connecting Calimesa with the community of Cherry Valley and Bogart Park. This will provide access to the San Gorgonio wilderness and the Pacific Crest trail.

There are 3 north-south walking trails in the City. The first is a multi-purpose trail along Fremont Street with its main artery extending south from Yucaipa; the second winds behind Country Village and proceeds south from Whitewater Canyon Wash; and the third links Whitewater Canyon with the Calimesa Hills trails. There are two alternate walking trails along Bryant Street and California Street which join within horse property and provide access to Singleton and Stage Coach Roads.

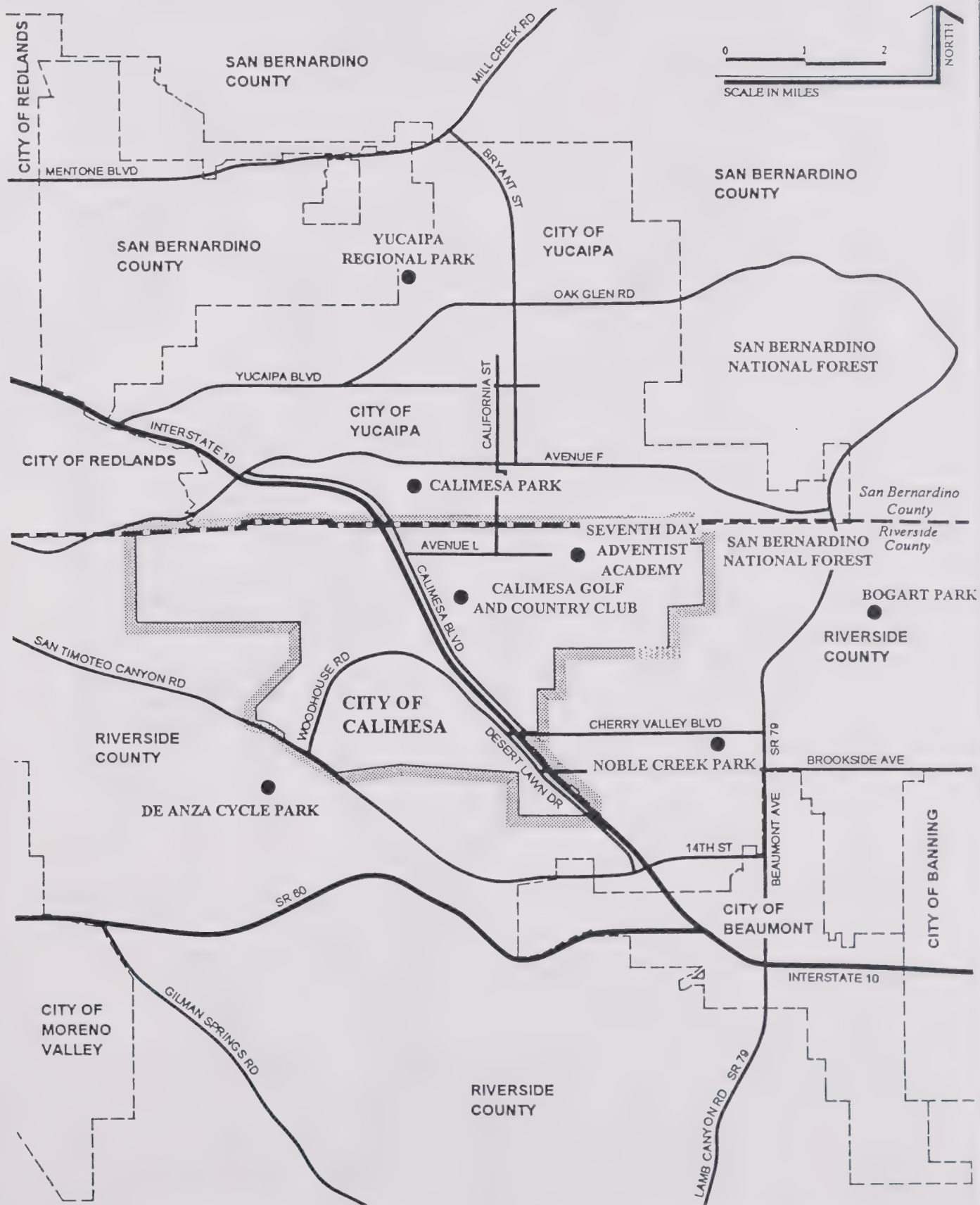
Horses, mountain bikes, and hiking activities are permitted on Calimesa's multi-purpose trail. The loop trail, connecting with the main Yucaipa artery, winds through the Calimesa Hills, to Stage Coach Road and Cherry Valley. The City's horse trail borders Holmes Way on the north, winding through the Canyons of the Calimesa Hills and south to the Oak Hills area.

The Landmark Land Company has proposed three trails in Calimesa as part of the Oak Valley Specific Plan: a U-shaped trail following San Timoteo Canyon Road through Cherry Valley; an east-west trail extending between Cherry Valley and San Timoteo Canyon Road alongside the Southern California Edison easement; and an east-west trail passing through the San Timoteo Canyon area, connecting with existing trails along County Line Road and Avenue L West.

### **Adjacent Recreational Facilities**

There are several regional parks in Yucaipa and Riverside County that are accessible to Calimesa residents (Exhibit 4-6). Numerous other smaller parks are found in the neighboring cities of Yucaipa and Redlands.

- Yucaipa Regional Park is located along Oak Glen Road in the northwest portion of Yucaipa, 2 miles northwest of Calimesa. Features of the 400-acre park include 3 large lakes, a swimming complex, snack bar, and an administrative office. Summer activities include use of two 350-foot water slides, paddle boats, and aqua cycle. Freshwater rainbow trout fishing is also available, and the San Bernardino County Regional Parks Department stocks the lakes every 2 weeks. Winter activities include tent and RV camping. Yucaipa Regional Park is also the site of July 4th and Cinco de Mayo festivities, and the Bluegrass Festival over Labor Day weekend. The park is operated and maintained by the County of San Bernardino.
- Bogart Park in the community of Cherry Valley is approximately 1 3/4 miles east of Calimesa. The park covers 600 acres and consists of hilly land with live oak trees,







## EXHIBIT 4-7 BIKEWAYS AND TRAILS



and a lake fed by Noble Creek. Available recreational activities include hiking, picnicking, and group camping. The park is operated by the County of Riverside.

- De Anza Cycle Park in Riverside County is a 640-acre concessionaire, off road vehicle (ORV) facility located adjacent to the City's southwest boundaries and opposite the Southern Pacific Railroad tracks.
- Calimesa Park is a 11.29 acre park located at 5th Street and Avenue I in Yucaipa, approximately 1/4 mile north of the City boundaries. Facilities at the park include a softball diamond, basketball court, and 2 tennis courts.

Between 1968 and 1970, the Calimesa Improvement Association, (presently the Calimesa Chamber of Commerce) helped form County Service Area 74, which appropriated funds from Riverside County residents' parcel fees to develop and improve Calimesa Park. A Joint Powers Agreement with the Yucaipa Valley Park and Recreation District in San Bernardino County provided the means for the bi-county cooperation to complete this park. Although Calimesa parcel fees were used to improve this facility, Calimesa Park is owned and operated by San Bernardino County.

- Noble Creek Park in the community of Cherry Valley is approximately 1 1/2 miles southeast of Calimesa. The park's 63 acres are developed with softball fields, baseball diamonds, tennis courts, picnic and playground facilities, a recreation center for receptions, and an administrative office. Noble Creek Park is part of the Beaumont-Cherry Valley Parks and Recreation District.

In addition, portions of the San Bernardino National Forest are generally located east of Calimesa adjacent to unincorporated Riverside and San Bernardino County areas. The San Bernardino National Forest offers camping facilities, hiking trails, and rest areas for public use.

### Proposed Park Sites

The City recognizes the need to provide for additional recreational areas and parkland to serve its residents. In order to achieve this objective, the City has approved 3 park sites, and is considering an additional 3 recreational sites. Table 4-3 describes approved and tentative parkland and recreational sites in Calimesa. Proposed park sites are shown in Exhibit 4-8.

TABLE 4-3 APPROVED AND TENTATIVE PARK SITES		
Name	Location	Features
<b>Approved Park Sites</b>		
Oak Valley Specific Plan	West of Interstate 10	199 acres of developed parkland; 837 acres containing 4 championship golf courses.



**TABLE 4-3  
APPROVED AND TENTATIVE PARK SITES**

<b>Name</b>	<b>Location</b>	<b>Features</b>
Hansberger-Country Club Ridge (Tract 26811)	Southeast of Ave. L and 2nd Ave.	39.8 acres of parkland, incorporating scenic and natural opens space interlinked by a system of equestrian and hiking trails. Picnic areas and play areas are planned for community use.
Hansberger-Country Club Estates (Tract 25151)	Southeast of Ave. L and 2nd Ave.	Nearly 40 acres of parkland dedicated to Tract 26811
<b>Tentative Park Sites</b>		
Poon Project (Tentative Tract 26925)	SE corner of Ave L and 2nd Ave.	Project proposed to dedicate 3.68 acres to natural open space.
Perisits Project	South of Ave. L, between 2nd Ave. and Douglas St.	Project proposed to dedicate 10 acres to parkland
ABS Development	East of Interstate 10, North of Cherry Valley Blvd.	Project in Planning Stage
Source: City of Calimesa, 1992.		

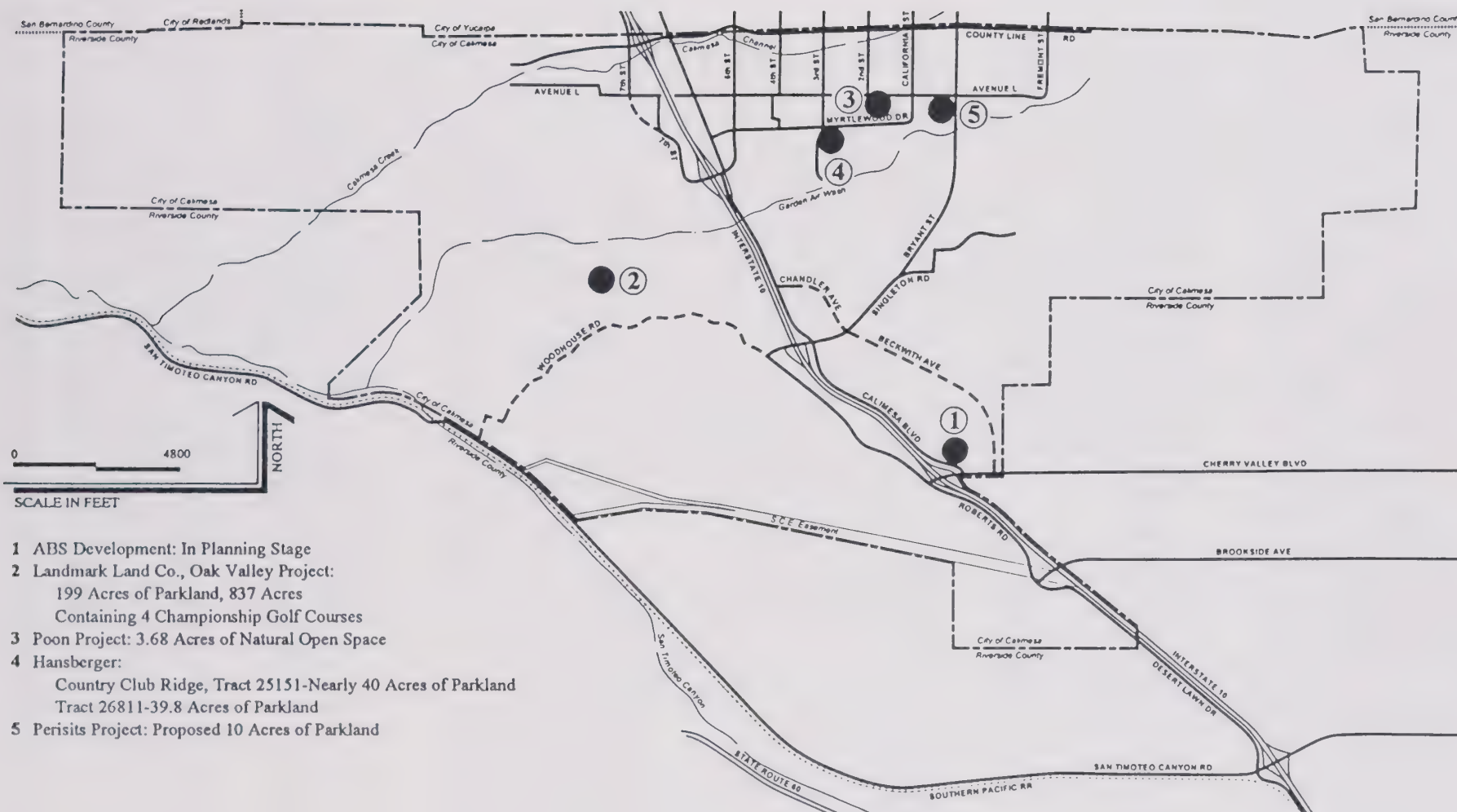
### **Funding Sources**

The City has adopted a Quimby Act Park-In-Lieu Ordinance for the payment of fees in lieu of park land dedication. The Quimby Act includes definite standards for determining the proportion of a subdivision that is to be dedicated as recreational space, and the amount of any in-lieu fee. The land and/or fees may only be used for providing park or recreational facilities to serve the subdivision paying these fees. In addition, the amount and location of land to be dedicated, or the fees to be paid must bear a reasonable relationship to the use of the park and the recreational needs of the future inhabitants of the subdivision. This ordinance is expected to fund future park development in the City.

### **Park Land Criteria**

The National Recreation and Parks Association (NRPA) has developed a generic classification system for park facilities and corresponding standards applicable to each park type. This classification system is designed to apply to a broad range of communities and requires some modification to make park standards applicable to Calimesa. Standards, such as those devised by the NRPA are useful in identifying existing deficiencies and in projecting future needs.

The NRPA standards classify parks according to their size, service area, and function. Theoretically, there may be some difficulty in making a direct link between the NRPA standards and activities that



- 1 ABS Development: In Planning Stage
- 2 Landmark Land Co., Oak Valley Project:  
199 Acres of Parkland, 837 Acres  
Containing 4 Championship Golf Courses
- 3 Poon Project: 3.68 Acres of Natural Open Space
- 4 Hansberger:  
Country Club Ridge, Tract 25151-Nearly 40 Acres of Parkland  
Tract 26811-39.8 Acres of Parkland
- 5 Perisits Project: Proposed 10 Acres of Parkland





are presently available to the residents. For example, the acreage of a particular park may correspond with the recommended NRPA standards for a neighborhood park but its proposed function may correspond more closely with that of a community park. In these instances, it is better to place the park in a category that better describes the park's actual function. Although the size of the Norton Younglove Multipurpose Senior Center fits within the mini-park category, the facility serves a larger service area radius and accommodates a variety of activities, thus functioning as a neighborhood park.

- Mini Park: The NRPA standards indicate that this type of park should serve the recreational needs of a specific group of persons such as small children or senior citizens. Mini parks should be located near to where the users live in close proximity to apartments, townhouse developments or senior housing projects. The service area of parks in this category should have a radius of one-quarter mile or less and an area of one acre or less. These same standards call for between 0.25 to 0.5 acre of mini park to be provided for every 1,000 residents. There are no mini-parks in Calimesa.
- Neighborhood Park: Neighborhood parks are designed for active recreational and athletic activities. These facilities should be centrally located in the neighborhoods where the users live. Access to these facilities should be designed to promote easy pedestrian access. According to NRPA, the service radius for these facilities is between one-quarter and one-half mile and generally serves up to 5,000 residents. Parks in this category should be at least 15 acres in size and there should be between 1.0 and 2.0 acres of neighborhood parks for every 1,000 residents. For purposes of this needs assessment, the Norton Younglove Multipurpose Senior Center falls in this category.
- Community Park: This category of parks generally offers a wide range of recreational amenities to users which may include athletic complexes, arenas, swimming pools, covered picnic areas, and playgrounds depending on the specific needs of the community and the availability of resources. These parks generally serve a number of neighborhoods and have a service area radius of one to two miles. The size of these parks may vary although the optimal size is 25 acres or more. The population service standard for this park is between 5.0 and 8.0 acres per 1,000 residents. The Calimesa Golf and Country Club functions as a community park.

The Norton Younglove Multipurpose Senior Center and the Calimesa Golf and Country Club provide 1.3 acres of neighborhood recreational facilities, and 108 acres of community parkland. Using NRPA criteria, the City is deficient in mini-park (-7.5 acres) and neighborhood park acreage (-9.2 acres), but has a surplus of community park acreage (+63.5 acres).

Development of all proposed park projects in the City would create 13.68 acres of neighborhood parks, and 1,116 acres of community parks, for more than 1,129 acres of parkland and recreational areas to Calimesa. Although additional recreation sites would augment existing deficiencies in neighborhood park acreage, Calimesa would remain deficient in mini-park acreage. Community-oriented recreational facilities would retain surplus acreage.

## **OTHER RECREATIONAL/OPEN SPACE**

### **Southern California Edison Easement**

The Southern California Edison (SCE) Easement, is located west of Interstate 10, forming a linear east/west path along the City's southern boundary to San Timoteo Canyon Road. The electrical power easement separates midway along Calimesa's boundary line, with west and northwest forks continuing through unincorporated Riverside County areas. The SCE easement, comprising approximately 85 acres, is presently retained as passive open space. The Landmark Land Company proposes incorporating a trail alongside the easement, as part of the Oak Valley Specific Plan.

### **Agricultural Land**

The San Gorgonio Pass and San Timoteo Canyon area had its beginnings in dairy production and its influence is still evident in the City's landscape character. Calimesa retains a rural community atmosphere through large vacant tracts and agricultural land in the southeastern portion of the City. Larger scale agricultural operations are located south of Chandler Avenue, while smaller scale agricultural operations, including several horse properties are interspersed in the residential neighborhoods in the northern portion of the City. In addition, a chicken farm ranch is located at the Holmes Street terminus.

### **Vacant Land**

Residential development is mostly concentrated in the City's north central areas, and commercial activities along or close to Calimesa Boulevard, the City's major thoroughfare. Much of the remaining areas retain their original rural character. A land use survey completed in 1992 identified approximately 6,913 acres (73 percent) of vacant and undeveloped land in the City. Approximately 3,932 acres (57% of all vacant land) is located adjacent to Interstate 10 between the City's north and south boundaries, comprising a portion of the Oak Valley Specific Plan area. Other major vacant land areas are located southeast of the Calimesa Golf and Country Club, and east of Calimesa Boulevard, between Chandler Avenue and the City's southeast boundary. Table 4-4 summarizes vacant land in the City.

**TABLE 4-4**  
**OPEN SPACE INVENTORY**

Zone District	No. of Parcels	Area (in acres)
Light Agricultural (A-1)	64	207.78
Agricultural-min. 2 acre lots (A-1-2)	3	4.58
Agricultural-min. 5 acre lots (A-1-5)	54	343.97
Residential Agricultural (R-A)	100	962.29
One Family Dwellings (R-1)	100	279.74
Multiple Family Dwellings (R-2)	33	28.97
Multiple Family Dwellings, 4,000 sq. ft. lot size (R-2-4000)	7	3.42
General Residential (R-3)	4	2.42
Mobilehome Subdivision and Mobilehome Park (R-T)	5	20.42
Mobilehome Subdivision, 8,700 sq. ft. lot size (R-T-8,700)	4	9.87
General Commercial (C-1)	6	4.60
General Commercial (C-P)	--	--
Scenic Highway Commercial (C-P-S)	21	56.79
Manufacturing-Serv. Comm. (M-SC)	4	1.70
Manufacturing-Medium (M-M)	5	2.70
Controlled Development Areas (W-2)	81	1,051.08
Oak Valley Specific Plan Area	--	3,932.55
<b>TOTAL</b>	<b>494</b>	<b>6,912.88</b>

Source: David Evans and Associates, Inc., 1993.





## SECTION 5: SAFETY

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### INTRODUCTION

This Profile Report for the Safety Element provides an accurate and up-to-date assessment of natural and man-made hazards in the City, including, but not limited to, earthquakes, landslides, fire, flood, dam inundation, and hazardous materials accidents. It also provides a framework by which safety considerations are introduced into the land use planning process.

The City of Calimesa is located in the San Gorgonio Pass area, just south of the San Bernardino - Riverside County boundary. Many of the safety issues addressed in this document are directly related to southern California's geologic and seismic characteristics, while other issues are particular to the distinctive geologic and topographic setting of this part of Riverside County. Southern California is one of the most seismically-active regions of the world, experiencing, on average, an earthquake of Magnitude 4 or greater every four years. Earthquakes could result in strong ground motions, surface rupture, and liquefaction in the City.

Most of Calimesa is underlain by a thick sequence of terrestrial deposits assigned to the San Timoteo Formation. Clay beds within this formation may serve as planes of weakness along which landslides may occur. Older alluvial deposits cap the hilltops and terraces, overlying the San Timoteo sediments. Younger alluvium occurs within the deeply incised channels that drain the area. These sediments, if coupled with shallow ground water conditions, have the potential for liquefying during a moderate to large earthquake.

Climate and topography play an important role in defining the threat to Calimesa from fires and floods. The undeveloped areas of the City sustain several plant varieties, including chaparral, that contain extremely flammable volatile oils. Areas where stands of this kind of vegetation are especially dense, such as along canyon bottoms, are very susceptible to brush fires. Structural fires can occur during an earthquake as a result of damage to natural gas pipes and connections, and toppled appliances. The ridge and canyon topography of this area also define the high risk flood hazard zones in the City, primarily along canyon bottoms.

### SEISMIC HAZARDS

The City of Calimesa is located near the northwestern end of the San Gorgonio Pass. This area is bounded by two of the most active faults in southern California, the San Andreas fault on the northeast, and the San Jacinto fault on the southwest. The Landers earthquake of June 28, 1992 is thought to have increased the likelihood of an earthquake of magnitude 7 or larger occurring in the next few years in the San Bernardino area, near Yucaipa (National Earthquake Prediction Evaluation Council, 1992). Other smaller faults in the region associated with the San Andreas fault system also have the potential for generating earthquakes that would result in strong ground shaking, and perhaps even surface rupture in the City. Strong shaking can result in liquefaction, landslides, or structural damage. Strong ground motion can also set into motion other hazards such as fire, hazardous materials accidents, or dam failure.

Earthquakes are normally classified as to severity according to their magnitude (as measured from seismographs), or their seismic intensity. The destructiveness of an earthquake at a particular location is commonly reported using a seismic intensity scale. Because the amount of destruction generally decreases with increasing distance away from the epicenter, earthquakes are assigned several intensities, but only one magnitude. Seismic intensities are subjective classifications based on observations of damage caused by past earthquakes. The Modified Mercalli Intensity (MMI) scale has 12 levels of damage, the higher the number, the greater the damage (Table 5-1). The intensity of seismic ground shaking at any given location is a function of several factors, but primarily the magnitude of the earthquake, the distance from the epicenter to the planning area, and the local geologic and topographic conditions. The amount of damage is also controlled to a certain extent by the size, shape, age, and engineering characteristics of the affected structures. Most structures in Calimesa are of single-story, wood-frame construction. This building type, although not immune to structural damage, is notably resilient to earthquake shaking.

TABLE 5-1  
MODIFIED MERCALLI INTENSITY SCALE\*

I.	Tremor not felt.
II.	Tremor felt by persons at rest or in upper floors of a building. (2)
III.	Tremor felt indoors. Vibrations feel like a light truck passing by; may not be recognized as an earthquake. Hanging objects swing. (3)
IV.	Hanging objects swing. Vibrations feel like a heavy truck passing by, and the jolt feels like a heavy ball striking the walls. Standing cars rock. Windows, dishes and doors rattle. Glasses clink and crockery clashes. Wooden walls and frames crack in the upper range of scale 4.
V.	Earthquake felt outdoors, and its direction can be estimated. Sleepers are awakened. Liquids are disturbed, some spilled. Small unstable objects are displaced or upset. Doors swing, closing and opening. Shutters and pictures move. Pendulum clocks stop, start or change rate. (4)
VI.	Earthquake felt by everybody. Many are frightened and run outdoors. Persons walk unsteadily. Window, dishes and glassware are broken. Knick-knacks and books fall off shelves; pictures fall off walls. Furniture moves or is overturned. Weak plaster and masonry D are cracked. Small bells in churches and schools ring. Trees and bushes are shaken.
VII.	Difficult to stand. Earthquake noticed by drivers of motor cars. Hanging objects quiver. Furniture is broken. Damage to masonry D, including fallen plaster, loose bricks and stones, cracks in tiles and cornices. Weak chimneys break at roof line. Some cracks in masonry C. Waves form in ponds, disturbing mud at the bottom. Slides and caving in sand and gravel banks. Large bells ring. Concrete irrigation ditches are damaged. (5)
VIII.	Steering of motor cars is affected. Partial collapse of masonry C structures. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting and falling of chimneys, factory stacks, monuments, towers and elevated tanks. Frame structures, if not bolted to foundations, shift. Loose panel walls are thrown out; decayed pilings brake off. Branches brake off trees. Changes in flow or in temperature of springs or wells. Cracks in wet ground and on steep slopes. (6)
IX.	General panic. Masonry D structures destroyed; masonry C heavily damaged, sometimes completely collapsed. General damage to foundations. Frame structures, if not bolted, shift off their foundations. Serious damage to reservoirs. Underground pipes are broken. Conspicuous cracks in the ground. In alluvial areas, sand and mud are ejected, forming sand craters.
X.	Most masonry and frame structures are destroyed. Most foundations destroyed. Some well-built wooden structures and bridges are destroyed. Serious damage to dams, dikes, and embankments. Underground pipelines are seriously damaged. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and in flatlands. Rails bent slightly. (7)
XI.	Rails bent greatly. Underground pipelines completely out of service. Many and widespread disturbances of the ground, including broad fissures, earth slumps and land slips in soft, wet ground. Sand- and mud-charged water ejected from fissures in the ground. Sea-waves (tidal waves or tsunamis) of significant magnitude. Severe damage to wood-frame structures, especially if near to the shock center. Severe damage to dams, dikes and embankments. Few, if any, masonry structures remain standing. Large, well-constructed bridges destroyed due to damage to their supporting piers or pillars. Wooden bridges are affected less. (8+)



TABLE 5-1  
MODIFIED MERCALLI INTENSITY SCALE\*

XII. Damage is nearly total. Lines of sight and level are distorted. Objects are thrown into the air. Great and varied disturbances of the ground, including numerous shearing cracks, landslides, large rock-falls, and numerous and widespread slumping of river banks. Fault slips in firm rock with notable horizontal and vertical offset. Water channels, both at the surface and underground are disturbed and modified. Lakes are dammed, rivers are deflected, waterfalls occur. The rolling effect of the seismic waves is actually seen at the ground surface.

Masonry A: Good workmanship, mortar and design. Reinforced, especially laterally, and bound together with steel, concrete, etc. Designed to resist lateral forces.

Masonry B: Good workmanship and mortar. Reinforced, but not designed to resist lateral forces.

Masonry C: Ordinary workmanship and mortar. Not reinforced or designed to resist horizontal forces.

Masonry D: Weak materials, such as adobe; poor mortar. Low standards of workmanship weak horizontally.

These masonry types are not to be confused with the conventional Class A, B, and C construction types.

\* Modified and rewritten after Richter (1958) and Topozada and others (1988) using Rossi=Forel's Intensity Scale. Bold numbers in parenthesis () indicate approximate equivalent in Richter Magnitude Scale. This comparison assumes the intensity is determined on a bedrock site near the earthquake epicenter.

The State of California, under the guidelines of the Alquist-Priolo Special Studies Act (Hart, 1990), classifies faults according to the following criteria:

- Active: faults showing proven displacement of the ground surface within the last 11,000 years (Holocene); and
- Potentially Active: faults showing evidence of movement within the last two million years (modified to 750,000 years by U.S. Geological Survey).

A fault that has not moved in the last 11,000 years, as determined from direct geologic evidence, is presumed to be inactive. However, the evidence necessary to prove that a fault has not moved within the Holocene is sometimes difficult to obtain (Hart, 1990.)

The State definition of an active fault is designed to gauge the surface rupture potential of a fault, and is used to prevent development from being sited directly on the trace of an active fault. In general, potentially active faults are, relative to active faults, less likely to be the origin of a damaging earthquake. In reality, however, there is a gradation of seismic risk posed by potentially active and active faults.

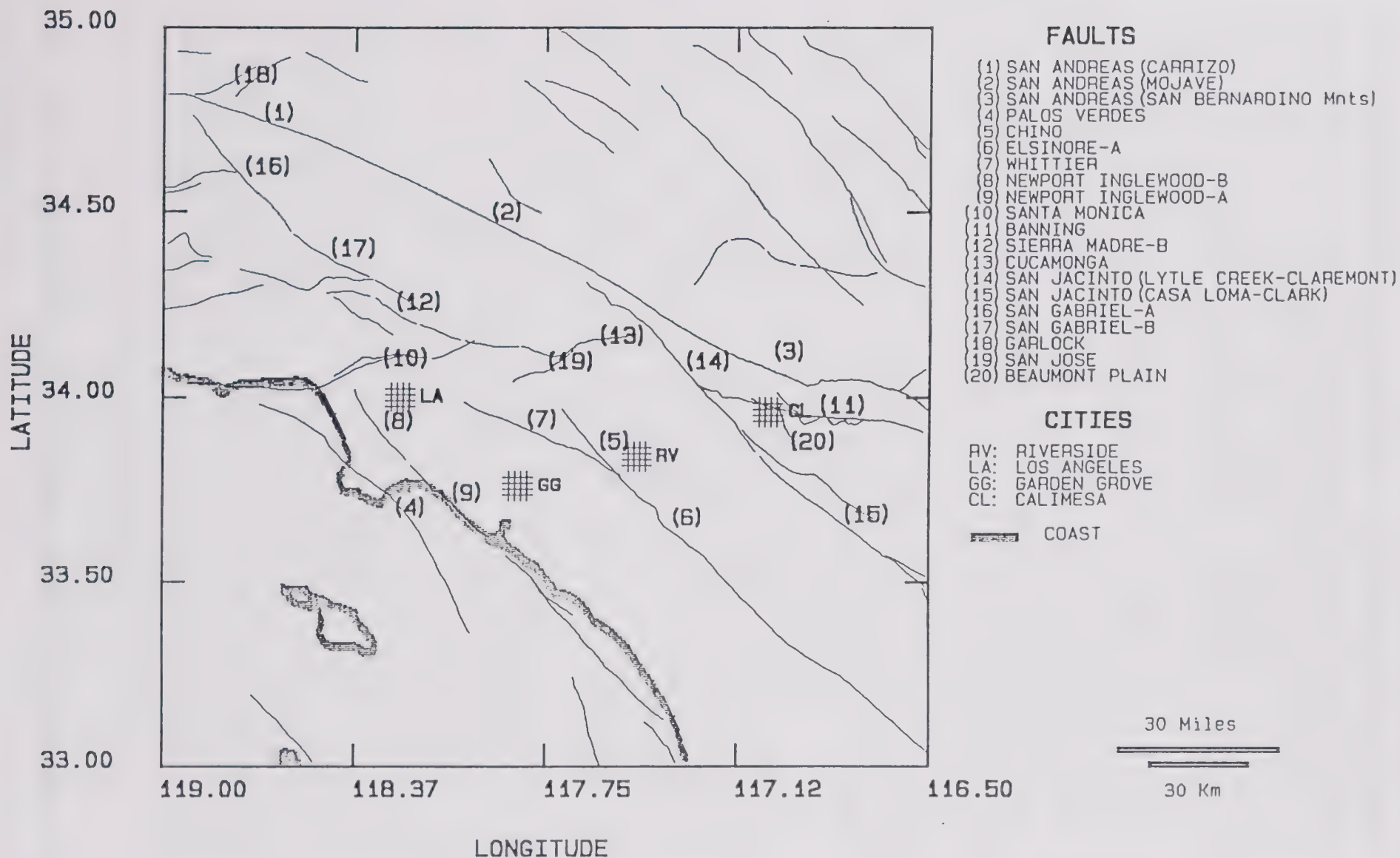
## Ground Shaking

Calimesa is located within Seismic Zone 4 of the Uniform Building Code (UBC, 1991), and Riverside County Ground Shaking Zones IV and V, as designated in the County's General Plan (1988). In designating these ground shaking zones, the County has recognized that some areas within UBC Zone 4 are more likely to experience strong ground motions during an earthquake because of their close proximity to an active fault, and because local geologic conditions can amplify the ground accelerations produced by an earthquake. In the Calimesa area, the County has included

those areas close to the San Andreas fault on the northeast, and to the San Jacinto fault on the southwest, as Ground Shaking Zone V. Other faults in the area can also generate strong ground motions in the City.

Table 5-2 (A) lists the relative likelihood of major earthquakes occurring on some of the active and potentially active faults shown on Exhibit 5-1. Table 5-2 (B) lists the faults most capable of impacting the City in order of potential severity, based on proximity to Calimesa and magnitude of their maximum credible earthquake. The San Andreas, San Gorgonio Pass, Banning, Cherry Valley, Beaumont Plain, and San Jacinto faults are most likely to cause high ground accelerations in the City (Table 5-2). Those faults listed in Table 5-2 (A) as least likely to generate an earthquake in the next 100 years should still be considered in the planning and design process if their maximum credible earthquakes could have a severe impact on the City.

TABLE 5-2 Relative Likelihood and Impact of Selected Major Earthquakes on the City of Calimesa			
A	Fault Name	PGA(g)	Likelihood of Occurrence Mcr
	San Andreas (San Bernardino)	.51	High 7.5
	San Jacinto (Lytle Creek-C Claremont)	.28	High 7.0
	San Andreas (3 segments)	.60	Moderate 8.0
	San Andreas (San Bernardino-Coachella)	.56	Moderate 7.8
	Banning	.55	Moderate 7.0
	San Andreas (Coachella)	.12	Moderate 7.5
	San Gorgonio Pass	.59	Low 6.9
	Pinto Mountain	.14	Low 7.3
	Crafton Hills	.31	Low 6.3
	Beaumont Plain	.42	Low 6.3
	Cherry Valley	.43	Low 6.3
B	Fault Name	PGA(g)	MM Intensity in Calimesa Mcr
	San Andreas (3 segments)	.60	X-XI 8.0
	San Andreas (Mojave - San Bernardino)	.56	IX-X 7.8
	San Andreas (San Bernardino-Coachella)	.56	IX-X 7.8
	Banning	.55	IX-X 7.0
	San Andreas (San Bernardino)	.51	IX 7.5
	San Jacinto (Lytle Creek - Claremont)	.28	VIII-IX 7.0
	San Gorgonio Pass	.59	VIII-IX 6.9
	San Jacinto (Casa Loma - Clark)	.24	VIII 7.1
	San Andreas (Coachella)	.12	VIII 7.5
	San Jacinto (Hot Spring - Thomas Mountain)	.26	VII-VIII 6.8
	Pinto Mountain	.14	VII-VIII 7.3
	Cherry Valley	.43	VII-VIII 6.3
	Beaumont Plain	.42	VII-VIII 6.3
	Crafton Hills	.31	VII 6.3



SOURCE: L & A

DEM DAVID EVANS AND ASSOCIATES, INC.  
 PROFILE REPORT

# EXHIBIT 5-1 SELECTED ACTIVE AND POTENTIALLY ACTIVE FAULTS IN SOUTHERN CALIFORNIA





**TABLE 5-2**  
**Relative Likelihood and Impact of Selected Major Earthquakes on the City of Calimesa**

A) shows the maximum credible earthquake (Mcr) each one of these faults is predicted capable of generating, and the likelihood of such an earthquake occurring within the next 100 years. The probabilities are ranked as high, moderate and low as follows: high - greater than 50 percent, moderate - 10 to 50 percent, low - less than 10 percent.

B) shows the same faults ranked according to their potential impact on Calimesa based on the Modified Mercalli Intensity value that their Mcr is estimated to be capable of generating in the City.

Source: Leighton & Associates, 1993.

The San Andreas Fault Zone extends from northern California to near the Mexican border, a distance of about 1,000 miles. Based on its geometry, historical seismicity, and data on how it has broken in past earthquakes, the fault zone has been divided into several segments. In southern California, the San Andreas fault consists of three segments: the Mojave, San Bernardino Mountains, and Coachella Valley segments. The city of Calimesa is closest to the San Bernardino Mountains segment. This segment is the most complex of the three, consisting of a series of braided fault branches that veer off from the predominantly southeast-northwest trend characteristic of the San Andreas, and bend to a more east-west direction.

The San Bernardino Mountains segment may be the source of a large earthquake in the near future (National Earthquake Prediction Evaluation Council, 1992). The aftershocks of the Landers and Big Bear earthquakes of July, 1992, increased the strain on that portion of the San Bernardino Mountains segment of the San Andreas located between the two aftershock zones. Seismologists from Caltech in Pasadena, and from the U.S. Geological Survey are keeping a close watch on the activity of the San Bernardino segment near Yucaipa because if small and moderate sized earthquakes continue to occur in this area, the likelihood of this segment rupturing in a larger earthquake could increase.

The San Bernardino Mountains segment of the San Andreas fault is thought capable of producing an earthquake of Richter magnitude 7.5. Such an event could produce mean peak ground accelerations in Calimesa of about 0.5g (g is the acceleration of gravity, equal to 32 feet per second squared), with an estimated duration of shaking of 35 seconds. The MM intensity predicted in Calimesa from such an event would be in the IX range. However, fault trenching studies indicate that several segments of the San Andreas fault may break simultaneously during large earthquakes. If the Mojave and San Bernardino Mountains segments rupture during the same earthquake, the resulting tremor of magnitude 7.8 could cause mean peak horizontal ground accelerations in Calimesa of about .56g, with a duration of strong ground shaking of about 44 seconds. The predicted MM intensity in Calimesa from such an earthquake is in the IX to X range. If all three segments of the southern San Andreas fault rupture in one event, the "big one" of magnitude 8.0 could cause mean peak horizontal ground accelerations of about 0.6g in Calimesa, with MM intensities in the X to XI range. Strong ground shaking would last about 50 seconds. Much higher accelerations could occur if local site conditions amplify the seismic waves generated by the earthquake. Higher intensities could be observed locally, especially in areas susceptible to liquefaction.

The Banning fault is a high-angle structure that is older than the San Andreas fault. Matti and others (1992a) have broken the Banning fault into three segments based on their geologic and geomorphologic characteristics, and their tectonic history during the last two million years. The western segment, extending from the San Jacinto fault east to the Calimesa area, is considered inactive because it does not break Quaternary alluvium. In fact, the fault zone in this area has no surface expression; the location of the fault has been inferred from gravity data and other indirect geologic evidence. The central segment extends from Calimesa to Whitewater Canyon. This segment also does not affect Quaternary deposits, however, there are indications that the zone has been modified by faulting associated with the San Gorgonio Pass fault. The eastern portion of the Banning fault, from its junction with the South branch of the San Andreas fault, and eastward to Whitewater Wash and the Coachella Valley, is active. Between Banning and Whitewater there are also several minor faults paralleling the Banning and San Andreas faults that break Quaternary deposits, and are considered active.

If the Banning fault broke along its entire length, it could generate an earthquake of Richter magnitude 7.0. Such an earthquake would be capable of generating mean peak ground accelerations in the City of Calimesa of about 0.55g, with an estimated duration of strong ground shaking of about 25 seconds. Such an event could result in Modified Mercalli intensities of about IX to X in the City. If only the eastern and central segments of the Banning fault broke during an earthquake, the peak horizontal ground accelerations and Modified Mercalli intensities felt in Calimesa would be significantly lower than the worst-case scenario presented herein.

The San Gorgonio Pass Fault Zone consists of a series of stepping reverse and thrust faults linked by right-lateral strike slip faults. Faults of the San Gorgonio Pass Zone are Quaternary in age; some faults in the eastern portion of the zone, between Beaumont and Whitewater, have been active in the Holocene (Matti and others, 1992). A maximum credible earthquake on the San Gorgonio Pass Fault Zone, of estimated Richter magnitude 6.9, could generate mean peak horizontal ground accelerations in Calimesa of about 0.59g, with Modified Mercalli intensities in the VIII-IX range. If only the eastern portion of the fault zone ruptured, the resultant earthquake, of estimated magnitude 6, would generate lower horizontal peak ground accelerations and Modified Mercalli intensities in the City.

Thrust faulting associated with the San Gorgonio Pass zone dissipates westward in the Cherry Valley vicinity. Matti and others (1992) show two unnamed faults in this area that may represent either the continuation of the San Gorgonio Pass Fault Zone, or a splay of the Banning fault. These faults coincide roughly with Bloyd's (1971) surface projection of the Cherry Valley fault. Bloyd (1971) identifies the Cherry Valley fault as a ground water barrier between the Beaumont and Singleton storage basins. The fault reportedly displaces older alluvium against bedrock of the San Timoteo Formation. A maximum credible earthquake of magnitude 6.3 on this potentially active fault would generate mean peak horizontal ground accelerations in the City of about 0.4g, with a duration of shaking of about 17 seconds. Modified Mercalli intensities in the VII-VIII range could be experienced in Calimesa.



The San Jacinto Fault Zone is part of the San Andreas Fault System. The two fault strands separate near the San Gabriel Mountains, where the San Jacinto fault extends southeastward to form the southwestern boundary of the San Jacinto Mountains and the San Timoteo Badlands. The high seismicity on this fault suggests that in this area of southern California, the San Jacinto fault, rather than the San Andreas fault, forms the margin between the Pacific and North American plates. Several magnitude 6.0 and larger earthquakes have occurred on the San Jacinto fault in the last 200 years. There is also significant microseismic activity on this fault.

The San Jacinto fault is also divided into several segments. The Lytle Creek - Claremont segment is located approximately six miles (ten kilometers) to the west-southwest of Calimesa. This fault segment is thought capable of generating a maximum credible earthquake of magnitude 7.0, which could generate mean peak horizontal ground motions at the City of about 0.3g. Strong ground shaking from this earthquake would last about 25 seconds, with seismic intensity values in the VIII-IX range.

The Beaumont Plain Fault Zone consists of a series of north-northwest trending fault scarps that offset Quaternary alluvium approximately 0.5 million years old (late Quaternary). The faulting mechanism for these faults are not well understood. However, the faults appear to have formed as normal, dip-slip displacements associated with an extensional regime (Matti and others, 1992). The longest of the faults that form the Beaumont Plain zone could cause a maximum credible earthquake of magnitude 6.3. Such an earthquake would generate mean peak horizontal ground accelerations in Calimesa of about 0.42g, with a duration of strong ground shaking of about 17 seconds. Anticipated damage in Calimesa would be typical of Modified Mercalli intensities between VII and VIII.

The Pinto Mountain fault is a prominent east-west lineament that bounds the north side of the Little San Bernardino Mountains and the Pinto Mountains. A maximum credible earthquake of magnitude 7.3 on this fault could generate peak horizontal ground accelerations in Calimesa of about 0.12g, with a duration of strong ground shaking of about 31 seconds. Such an earthquake would cause damage typical of MM intensities between VII and VIII in the City of Calimesa.

The Crafton Hills Fault Zone is similar in style of faulting to the Beaumont Plain Fault Zone. The faults in the Crafton Hills zone form a series of downdropped and upthrown blocks in the Redlands-Yucaipa vicinity that offset late Quaternary and Holocene alluvial deposits. A maximum credible earthquake of Richter magnitude 6.3 could be generated by the longest of these faults, causing mean peak horizontal ground accelerations in Calimesa of about 0.3g. Strong ground shaking would last about 17 seconds in the City, causing damage equivalent to about VII in the MM intensity scale.

## **Fault Rupture Hazards**

Fault rupture hazards are gauged by the youngest geologic layer a fault offsets. The hazard of surface fault rupture, with consequent damage to structures directly overlying the trace of an active fault, led to the enactment of the Alquist-Priolo Special Studies Zone Act (APSSZ) of 1972 (Hart, 1990). Evidence of fault displaced sediments that are less than 11,000 years old is used as a yardstick to gauge the surface rupture potential of faults. The objective of fault investigations within an APSSZ is to locate the trace of the fault so that setbacks away from the fault can be prescribed.

No Special Studies Zones have been designated by the CDMG within the city of Calimesa. However, the APSSZ Act allows individual jurisdictions to create special studies zones around faults not yet recognized by the State as active. The County of Riverside has designated two such Fault Hazard Zones within the city of Calimesa, for the Banning and Cherry Valley faults. Other faults in Calimesa include the Singleton Ranch, Shadybrook Ranch, and San Gorgonio Pass Zone.

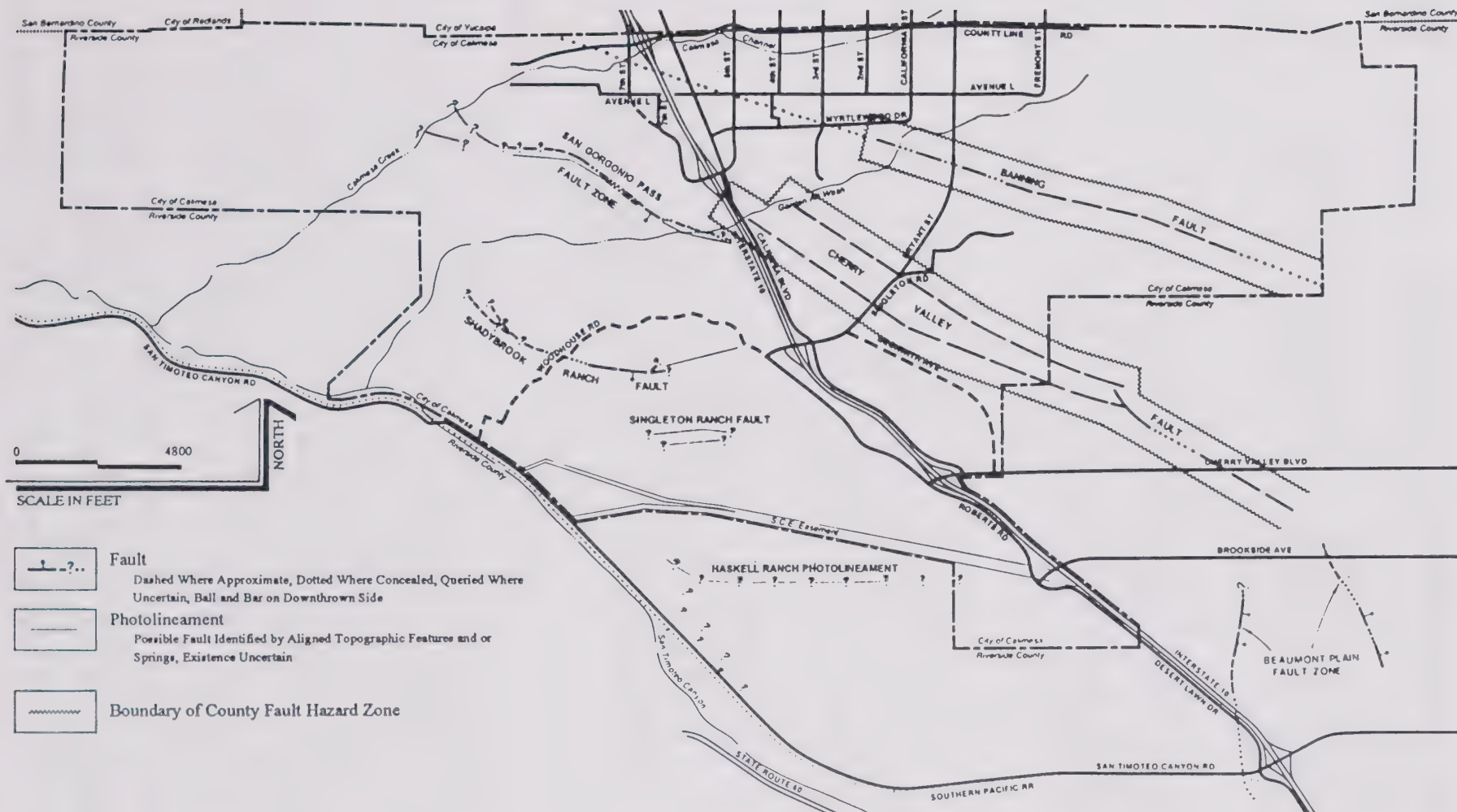
The Banning fault extends across the northeastern portion of Calimesa (Exhibit 5-2). Although in the Calimesa area the Banning fault does not offset Holocene-age deposits, and is therefore considered inactive (Matti and others, 1992; Rasmussen and Associates, 1990; Dames and Moore, 1987), the County has designated a Hazard Zone for this fault. To the east, the Banning fault does displace late Quaternary and Holocene alluvium, and its central segment has been reactivated by faulting of the San Gorgonio Pass Fault Zone (Matti and others, 1992a). Given that the geologic data suggests that this fault has had a complex history that includes incorporation into the San Andreas Fault System, future movement on the western segment of the Banning fault cannot be precluded.

The Cherry Valley fault has been mapped within Calimesa city limits as two northwest-trending strands that subparallel the Banning fault (Riverside County, 1988) (see Exhibit 5-2). Rasmussen and Associates (1990) have classified these fault strands as potentially active and have recommended a 200-foot setback zone from the traces of the Cherry Valley Fault, unless future subsurface investigation prove that the fault traces are inactive.

The Singleton Ranch fault is located in the west-central portion Calimesa. Surface expression of this fault includes alignments of breaks in slope and springs (Dames and Moore, 1987). The Shadybrook fault has been mapped as extending from the northern portion of Singleton Ranch westerly into Shutt Ranch. Although Rasmussen and Associates (1978, 1983a, 1983b, in Dames and Moore, 1987) have not been able to document the existence of this fault, Michael Brandman Associates (1988) have classified the Shadybrook fault, and the Singleton Ranch fault as potentially active. A setback of 150 feet has been recommended for portions of the Singleton Ranch and Shadybrook faults (Michael Brandman Associates, 1988).

The active San Gorgonio Pass Fault Zone extends through the central portion of the City. The fault is marked by surficial evidence, including aligned linear drainages, breaks in slope, saddles, possible scarps, and zones of carbonate alteration within the San Timoteo Formation (Dames and Moore, 1987). Matti and others (1992) indicate that the San Gorgonio Pass Fault Zone displaces late





SOURCE: Leighton and Associates, Inc.





Holocene alluvium east of Oak Valley. Michael Brandman Associates (1988) have recommended a 150-foot setback from portions of this fault zone.

The Haskell Ranch photolineament extends in a westerly direction across the southern portion of the City. This photolineament has been delineated by Dames and Moore (1987) based on an alignment of noses of several spur ridges and springs. Dames and Moore were unable to discern if the photolineament is caused by a fault.

Other faults in close proximity to, but not within City limits, include the Crafton Hills Fault Zone and the Beaumont Plain Fault Zone. Investigations have indicated that the Chicken Hill and Western Heights faults of the Crafton Hills Fault Zone are active in the Yucaipa area (Rasmussen and Associates, 1990). The Beaumont Plain Fault Zone consists of several north-northwest trending fault traces that offset older alluvium. This fault zone is considered potentially active (Michael Brandman and Associates, 1988).

Second-order tectonic ground deformation, in the form of ground fissuring, has been documented in some hillside areas in recent earthquakes. Ground fissures triggered by the 1989 Loma Prieta earthquake appear to have occurred along previously-mapped faults secondary to the San Andreas fault, or associated with apparent fault-related topography (EERI, 1989). Displacement, generally extensional but with some components of lateral and vertical movement, appeared to occur mostly along high-angle bedding planes in bedrock.

The surface rupture potential during an earthquake of the Banning, Cherry Valley, Singleton Ranch, and Shadybrook Ranch faults is credible, given the structural complexity of the Calimesa area and the close proximity to the San Andreas and San Jacinto Fault Zones. Coseismic ground fissuring along high-angle bedding planes and secondary faults cannot be precluded either. Site-specific studies, particularly if the proposed development is a critical facility, should address surface rupture potential on a case-by-case basis.

### **Liquefaction**

Liquefaction may occur when loose, unconsolidated, saturated fine- to medium-grained sandy soils are subjected to ground vibrations during a seismic event. This occurs in areas where the ground water table is within 50 feet of the ground surface, and if the Modified Mercalli intensities are VII and greater. When these sediments are shaken, a sudden increase in pore water pressure causes the soils to lose strength and behave as liquid. Excess water pressure is vented upward through fissures and soil cracks causing a water-soil slurry to bubble onto the ground surface. The resulting features are called sand boils, sand blows or "sand volcanoes". Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and flow failures, or slumping. Structures built on soils that liquefy may sink or topple over as the soil loses its bearing strength.

In the Calimesa area, most of the canyons tributary to San Timoteo Creek are filled with loose, unconsolidated deposits that have the potential for liquefying. Various engineering geology and geotechnical studies conducted in the Oak Valley area of Calimesa have confirmed the presence of

liquefiable soils in the canyon bottoms (CHJ Inc., 1983; Dames and Moore, 1987; Michael Brandman and Associates, 1988; Rasmussen and Associates, 1978, 1983a in Dames and Moore, 1987). Where ground water is within 30 feet of the surface, these soils are considered to have a high to very high liquefaction susceptibility. Areas underlain by loose unconsolidated deposits and where ground water is between 30 and 50 feet of the ground surface, are considered to have a moderate liquefaction susceptibility. Areas underlain by older alluvium and sediments of the San Timoteo Formation are considered to have a low liquefaction potential, since these deposits are generally consolidated, and typically occur in areas where the ground water table is 50 feet or more below the ground surface. Areas susceptible to liquefaction are shown on Exhibit 5-3.

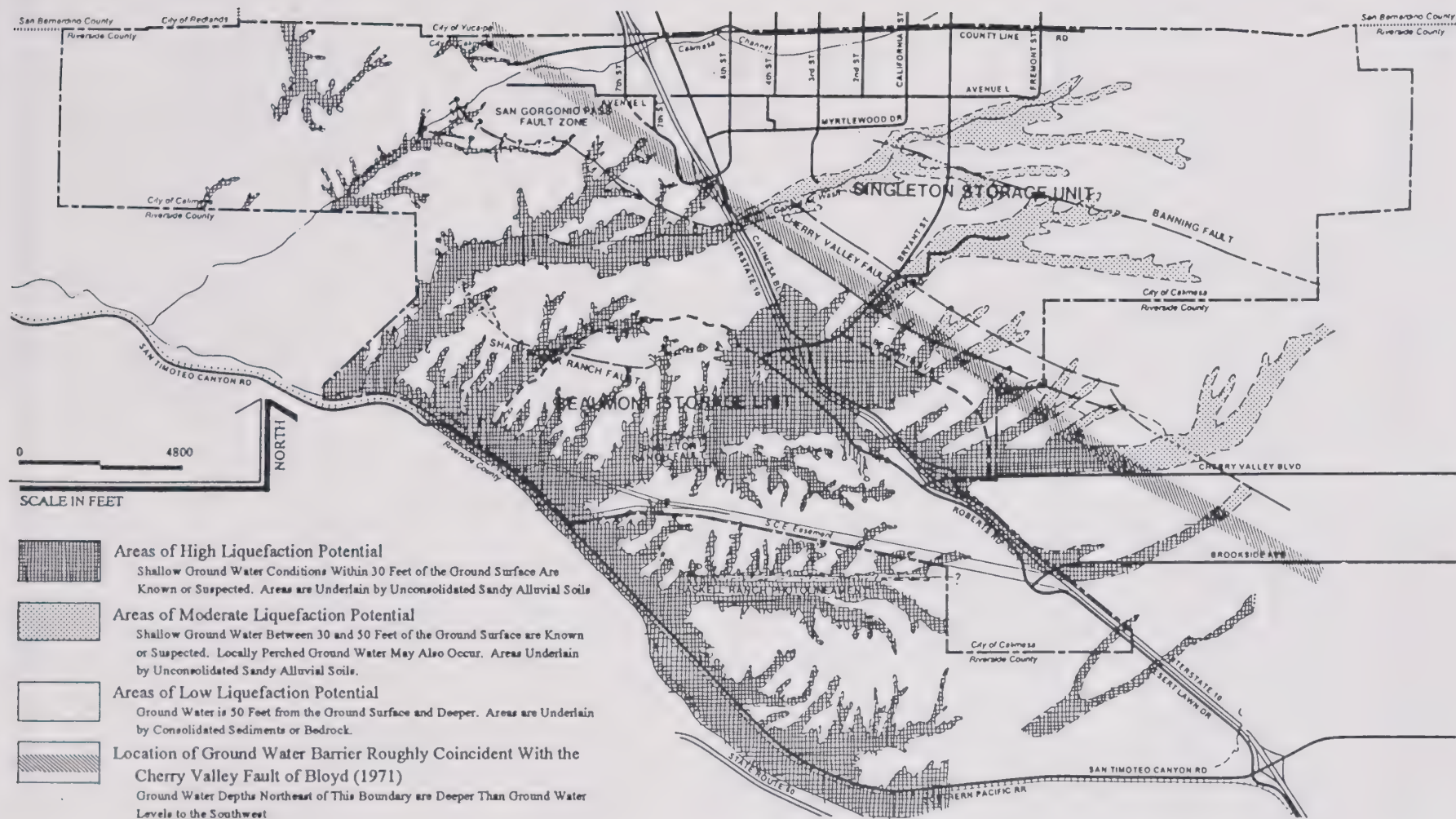
The liquefaction susceptibility zones described herein generally coincide with the liquefaction susceptibility zones shown on the Riverside County Seismic Hazards Map of the General Plan (Riverside County, 1988). However, the County's General Plan does not identify zones of liquefaction northeast of Interstate 10. Bloyd (1971) has identified a subsurface ground water barrier that is approximately coincident with the Cherry Valley fault. This ground water barrier transects the city limits in a northwesterly direction. On the northeast side of this barrier, ground water is encountered at significantly greater depths than on the southeast side. Therefore, the potential for liquefaction is reduced northeast of the barrier. Depth to ground water northeast of the Cherry Valley fault has been estimated to be greater than 100 feet (Rasmussen and Associates, 1990). However, younger alluvium within incised drainages may have seasonally shallow or perched ground water. Site-specific geotechnical studies are necessary to determine the liquefaction potential of the sediments underlying a site. The liquefaction potential of the sediments underlying the areas shown on Exhibit 5-3 as having a high or moderate liquefaction susceptibility should be evaluated further prior to development.

### **Seismic Hazards in the City**

Most injuries and property damage from a major earthquake impacting the City will be caused by strong ground motion, especially structural and nonstructural damage to buildings. The developed areas of Calimesa consist mostly of low-density and medium density residential zones. Less extensive areas are devoted to low-rise commercial development. Low-rise buildings (less than 3-stories) common in the City are more likely to be damaged by a near-field earthquake, such as one on the Banning fault, the San Bernardino segment of the San Andreas fault, or the northern portion of San Jacinto fault.

**Residential Development:** The wood-frame construction used in the residential and some commercial development in the City generally performs well during earthquakes. These buildings may experience significant structural and nonstructural damage, but rarely collapse. However, a trend in wood-frame construction in recent years, in particular in housing construction, has been the split level and irregular floor plan. Earthquake intensities of VIII in the MM Scale can cause torsional racking of the foundation and wall elements of irregularly shaped structures. Split level houses, as observed in the Loma Prieta Earthquake, are also susceptible to damage caused by the weakness of the pole platforms or pole structures used to support the structure. Vertical changes in strength are termed "soft-stories" and are also manifested in other types of construction.





SOURCE: Leighton and Associates, Inc.



Single-family residences built before the 1952 Building Code was implemented are more likely to slip off their foundations as a result of strong ground motion associated with near-field earthquakes. Mobile homes are also susceptible to slipping off their foundation and should be secured.

**Commercial and Industrial Development:** Buildings using tilt-up concrete walls are found in some commercial development. Roof collapse has been observed in some pre-1971 commercial buildings using this type of construction. Concrete and steel-framed buildings are more earthquake resistant forms of commercial construction and should be encouraged. Unusual architectural features such as long spans, minimal amount of interior shear walls, or irregular shapes may also be found in commercial development. These features can result in significant damage or collapse.

**Critical Facilities:** Critical facilities are structures and parts of a community's development that must remain operational after an earthquake; facilities that pose unacceptable risks to public safety if severely damaged are also of critical concern. Essential facilities such as medical centers, fire and police stations, emergency centers, and communication centers are needed during an emergency. High-occupancy facilities have the potential of resulting in a large number of casualties or crowd control problems. This category includes the Senior Center, churches, and large multifamily residential complexes. Dependent care facilities that house populations with special evacuation considerations, such as preschools and schools, group care homes, and nursing and convalescent homes are also considered critical facilities.

It is paramount to ensure that critical facilities designed for human occupancy possess no structural weaknesses that can lead to collapse. The State has jurisdictional responsibility to ensure that public schools are adequately constructed to seismic standards (Garrison Act, 1969).

Any multistory structures planned in the Oak Valley development should be built to the latest building code specifications, and should include site-specific seismic response analyses, especially if located in areas identified as having a moderate to high susceptibility to liquefaction. The County Fire Department is responsible for inspections of deficient electrical, plumbing, mechanical or fire safety fixtures in high-occupancy residential and commercial facilities. This works to prevent earthquake-induced hazards, as well as improving day-to-day fire safety.

**Unreinforced Masonry Buildings:** There is reportedly only one structure in the City of Calimesa that is of unreinforced masonry construction. This building is the old post office.

**Nonstructural Hazards:** Nonstructural damage is perhaps the largest expected source of injury in an earthquake. Buildings with exterior nonstructural hazards, such as cornices and parapets pose hazards to the public if not properly secured. Toppled furniture, book shelves, and interior equipment and decor pose additional hazards. In a case where continued function is paramount (i.e., critical facilities), special efforts should be made to ensure that communication equipment and emergency generators are not damaged.



## **Earthquake Emergency Considerations**

Disaster preparedness and earthquake emergency considerations are discussed below.

**Emergency Operations Center:** The Senior Center located at 908 Park Avenue is the city-designated Emergency Operations Center. Their telephone number is (909) 795-2287. Mobile homes housing the temporary City Hall offices are located next to the Senior Center. The Calimesa Emergency Organization structure and the City's emergency procedures are detailed in the City of Calimesa Multi Hazard Functional Plan (1992).

**Medical Care:** The nearest hospitals to the City are San Geronio Pass Hospital and Redlands Community Hospital.

**Fires and Evacuation:** Riverside County Station No. 21, located at 906 Park Avenue in Calimesa, provides fire suppression services for the City. Simultaneous evacuation of high-occupancy structures, and the occurrence of earthquake-induced fires in the City could tax the Fire Department's manpower resources.

**Fire Flow:** Water pipelines can be damaged by surface rupture, liquefaction, landslides, or high frequency seismic waves if significant vertical or horizontal displacements of the ground occur (NCEER, 1989). Breaks in the water distribution pipelines can result in significant reductions in water pressure that can slow post-earthquake fire suppression efforts. Water reservoirs in the City are insufficient to provide at least a three-day supply of water, especially if some of this water is used for fire suppression. If there is a loss of power, only those wells equipped with gas-powered emergency generators will be able to supply the City with water.

**Power:** Calimesa is supplied with electrical power by the Southern California Edison Company. High frequency ground motions characteristic of a near-field earthquake and seismic intensities as low as VII can seriously disable the electrical network system (Hayes, 1987; Topozada et al., 1988). In case of a major earthquake in the area, residents should prepare to have no electricity for at least three days.

**Communication:** Damage to computer switchboards and power loss will impair emergency communications. Fire Station No. 21 has one base radio, three hand-held radios and four mobile radios installed in their vehicles. The Emergency Operations Center is equipped with a Disaster Case Radio that can monitor all frequencies. These can serve as temporary communication links with similarly-equipped facilities in the area. Telephone systems may be used if the computer switchboards are not damaged, and the lines are not saturated.

**Natural Gas:** Damaged natural gas pipelines and connections may result in service disruption, and in some cases, fire.

**Transportation:** Earthquake-induced landslides may hinder circulation into and out of the San Gorgonio Pass, which could hinder evacuation efforts provided by the County's Fire Department and other aid organizations.

**Hazardous Materials:** The potential for earthquake-induced hazardous materials accidents in adjacent jurisdictions must be addressed in disaster planning scenarios for the City of Calimesa.

## **GEOLOGIC HAZARDS**

### **Geologic Setting**

The City of Calimesa is located in the western portion of the San Gorgonio Pass within the northernmost portion of the Peninsular Ranges geomorphic province. This portion of California is a geologically complex region due to the many faults that transect the area. The San Gorgonio Pass is a tectonic physiographic feature that separates the San Bernardino Mountains of the Transverse Ranges on the north from the San Jacinto Mountains of the Transverse Ranges on the south, and is expressed as a deep narrow notch that cuts through the mountains into the Colorado Desert to the east.

Geologic hazards and geotechnical constraints in the City of Calimesa are controlled by the engineering characteristics of the sediments and rocks that underlie this area. Most of the Calimesa vicinity is underlain by a thick sequence of terrestrial sediments that rest on basement comprised of igneous-metamorphic rocks (Allen, 1957). Deep boring data indicate that continental sediments underlying the Calimesa area are over 5,000 feet thick beneath Oak Valley. In the Haskell Ranch area, these sediments are over 3,000 feet thick.

Rocks of the San Gorgonio igneous-metamorphic complex (Allen, 1957) consist of gneiss, schist, gabbro and quartz monzonite. In Calimesa, basement rocks crop out in the northeastern portion of the City, primarily northeast of the Banning fault.

Terrestrial sediments in the Calimesa area include the San Timoteo Formation, Gray fanglomerate, older alluvium, and younger alluvium. The San Timoteo Formation is of late Pliocene to Pleistocene age (deposited approximately 1.6 to 3.4 million years ago) and consists of sandstone, silty sandstone, claystone, and poorly sorted gravelly to bouldery sandstone deposited by streams emanating from the San Bernardino Mountains to the north. San Timoteo sediments are generally friable to moderately indurated, easily erodible, and poorly bedded in outcrop.

Gray fanglomerate (Dibblee, 1982) crops out in the northeastern portion of the City, southwest of the Banning fault. The fanglomerate is Quaternary in age and is distinctive because it is comprised of weathered boulders of gray migmatitic gneiss (Allen, 1957). Fragments of greenschist indicate a local provenance in the mountains to the north.

Older alluvial sediments are present as hilltop remnants and terraces in the Calimesa area. These deposits are nearly horizontal and lie on eroded surfaces of the San Timoteo Formation, forming a



distinctive flat plain. Older alluvium is reddish brown in color and contains beds of clayey silt and poorly sorted sand with gravel, boulders and clay. Older alluvial sediments were deposited approximately 1.6 million years to 11,000 years ago.

Younger alluvium occurs in the active channel of San Timoteo Wash and tributary canyons, where the alluvium has been deposited on sediments of the San Timoteo Formation. The younger alluvial deposits are 11,000 years old and younger. These deposits consist of poorly bedded, unconsolidated sand to silty sand with minor amounts of gravelly and bouldery sand within active stream channels, that grade into silty sand and clay outside the active channels. Younger alluvium is relatively thin where it overlies the San Timoteo Formation and within small tributary canyons, and thicker in the larger drainages and at canyon mouths.

### **Landslides and Slope Instability**

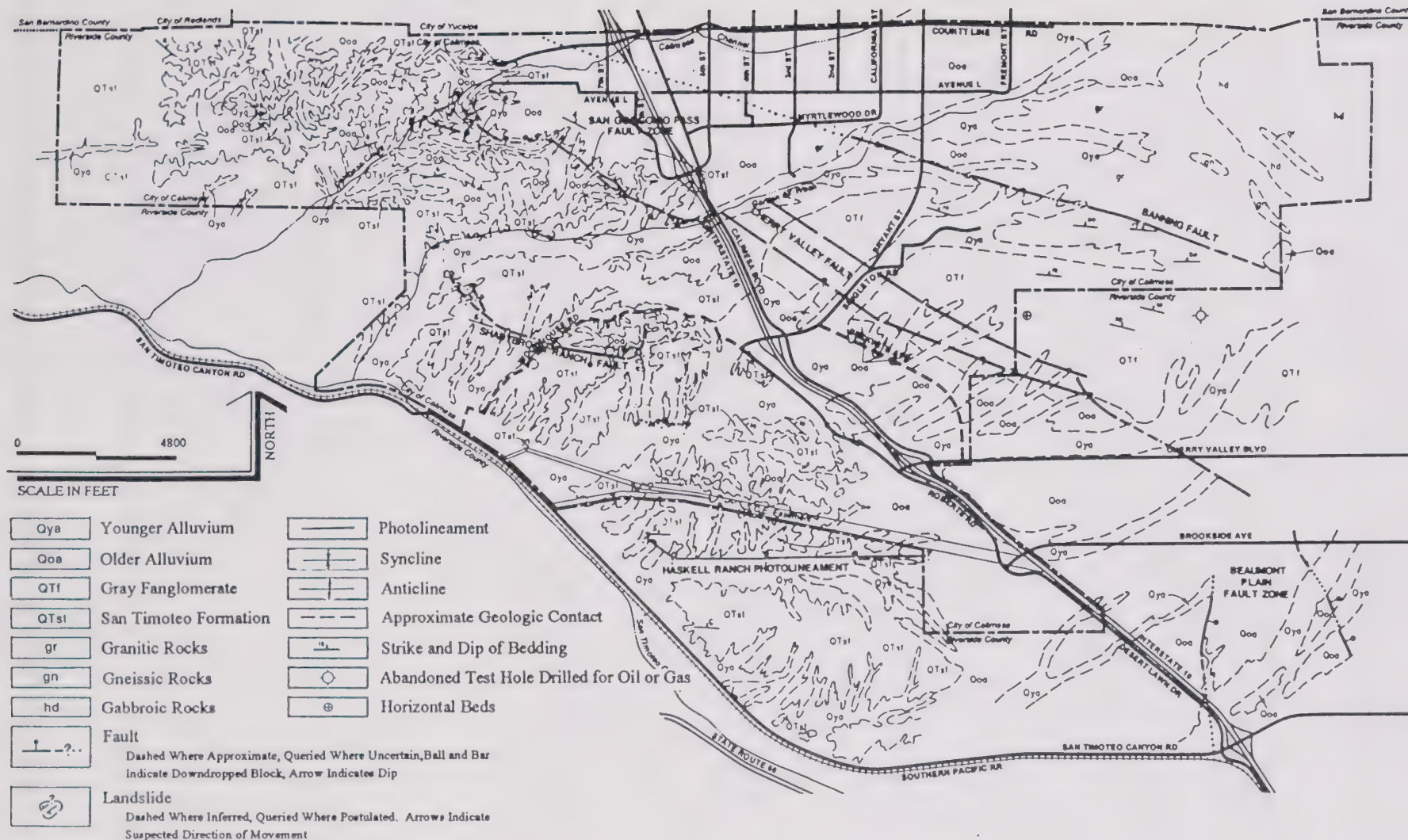
The soils and bedrock units underlying the City of Calimesa are susceptible to landsliding, debris and mudflows, settlement, and erosion. Soils in some areas of Calimesa may also have a high expansion potential.

The younger alluvial deposits, typically located within the flatter valley floor areas, are generally not susceptible to landsliding or debris and mudflows. However, most of the Calimesa area is underlain by older alluvium and sediments of the San Timoteo Formation. Where these deposits are exposed in locally steep faces, such as river bank cliffs, the sediments are susceptible to surficial soil slips, debris flows, and mudflows (Fife and others, 1976; Michael Brandman Associates, 1988; Rasmussen and Associates, 1990). Mudflows can occur in areas burned off in a wildland fire, if heavy seasonal rains strip off the unvegetated soil cover.

Areas of greater topographic relief are susceptible to deep-seated landslides (Riverside County Comprehensive General Plan, 1988). Past investigations at Oak Valley have identified deep-seated, mostly translational, landslides involving both surficial materials and bedrock (Highland Soils Engineering, Inc., 1986; Rasmussen and Associates, 1978, 1983a, 1983b in Dames and Moore, 1987). Evidence for one deep-seated landslide has been documented in the area northeast of the intersection of Singleton Road and Interstate 10 (Rasmussen and Associates, 1990). These landslides have little geomorphic expression and probably occurred as translational landslides involving downslope movement of material along bedding planes, but may also involve some component of rotational failure in which a portion of the movement occurs along an arcuate surface. Deep-seated landslides are most likely to occur where bedding (especially clay beds) dip in the same direction and at a shallower angle than the slope. Bedding in the San Timoteo Formation typically dips five degrees in a northerly direction, and the fanglomerate units typically dip ten degrees in a northerly direction (Dibblee, 1982). Therefore, the potential for deep-seated landslides is greatest on north-facing slopes (see Exhibit 5-4).

Slope modification during grading can render slopes unstable. Slope instability occurs when bedding planes intersect the slope face of either natural slopes or designed cut slopes. In the Calimesa area, canyons generally trend west and southwest, while bedding is generally inclined to the north at





SOURCE: Leighton and Associates, Inc.



shallow dip angles. Therefore, out-of-slope-bedding conditions commonly occur on north-facing slopes. Site specific investigations are necessary to determine potential slope instability problems at specific sites (tract or parcel size).

Exhibit 5-5 shows the distribution of known landslides and areas susceptible to landslides in the City. Some of these landslides may have been stabilized through grading activity. Generally, the landslides depicted are "potentially active", meaning they could be reactivated in the future. Landslides may be reactivated by excessive rainfall, artificial introduction of water into the slope (such as from landscaping irrigation and/or broken water or sewage lines), improper site design or grading practices, or triggered by strong ground motion during an earthquake. Grading projects must identify and address such constraints as a condition of project approval. The Riverside County Geologist acts as reviewer for the City to ensure that all potential geologic problems are addressed.

**Earthquake-Induced Landsliding:** Strong earthquake-generated ground motions can worsen existing unstable slope conditions, particularly if coupled with saturated ground conditions after an intense rainfall period. Generally, if engineered slopes are designed properly, they will perform well under strong ground motion. Typical earthquake-induced landslides in bedrock and in terrain similar to that of the Calimesa area include shallow slumps and slides, and are commonly associated with steep road cuts and natural slopes. The 1989 Loma Prieta Earthquake showed that reactivation of larger, dormant, deep-seated landslides along weak bedding is also possible.

**Storm-Induced Landsliding and Erosion:** Heavy rainfall often triggers surficial sliding (debris flows and mudflows) along the sides of canyons and on steep slopes. Hill slopes formed in San Timoteo Formation and older alluvium, especially if not properly planted, are extremely susceptible to erosion as indicated by the presence of badlands topography in the area.

Current grading codes include design guidelines that if followed properly, can reduce the hazard of mudflows and erosion. These guidelines include provisions for planted and maintained slopes, retaining walls, drainage devices, and debris basins. Older developed hillside areas of the City may have not been designed to current grading code standards, and may stand a greater likelihood of experiencing storm damage.

### **Subsidence from Ground Water Withdrawal**

Ground subsidence as a result of ground water extraction has been documented at several locations in California including the Bunker Hill-Yucaipa, Chino-Riverside, and Temecula areas (Lofgren, 1971; Shlemon and Hakakian, 1992). Subsidence in these areas has typically occurred over broad areas, in valleys filled with thick alluvium, where ground water levels have declined as much as 150 feet over a period of several tens of years. Available data suggest that ground water levels have historically declined as much as 60 feet beneath portions of the Calimesa area. However, ground subsidence has not been documented (Michael Brandman Associates, 1988) partly because most valleys contain unconsolidated, subsidence-prone sediments only at shallow depths.



In the Calimesa area, the projected decline in water levels due to ground water withdrawal for the years 1965 to 2015 is estimated at less than 150 feet (Lofgren, 1971). Based on these projected water level changes, subsidence due to ground water withdrawal will probably not exceed one to two feet (Lofgren, 1971).

Fissuring associated with extraction of ground water generally occurs when large amounts of ground water are extracted from a relatively small area. Fissuring typically occurs in unconsolidated deposits, but could also occur in semi-consolidated or highly fractured strata at the boundary of sharp lithologic changes, such as along faults or steep-walled valley margins where bedrock and alluvium are juxtaposed (Shlemon and Hakakian, 1992). Alluvial valleys in the Calimesa area are not bounded by faults, except possibly by the buried Haskel Ranch photolineament. Fissuring is not likely to occur in the Calimesa area because ground water in the area is generally withdrawn from a number of wells that tap into several different ground water subbasins.

### **Collapsible and Expansive Soils**

Low-density soils may collapse and settle as a result of static or seismic loading and hydrocompaction. Hydrocompaction is typically associated with granular, sandy soils, and occurs when the loose, dry structure of the sand grains held together by a clay binder or other cementing agent, collapses upon the introduction of water. Site specific investigations (Dames and Moore, 1987; Leighton and Associates, 1989a, 1989b, 1989c, 1990; Michael Brandman Associates, 1988; Rasmussen and Associates, 1978, 1983a, and 1983b in Dames and Moore, 1987) suggest that some soils in the Calimesa area may be susceptible to significant consolidation and hydrocompaction. In general, these materials appear to be limited to the younger alluvium on the floors of major drainages. The settlement potential of the San Timoteo Formation and other bedrock materials in the Calimesa area is low.

Geologic and engineering geologic reports indicate that soils in Calimesa generally have a low shrink-swell potential (U.S. Department of Agriculture, 1971; CHJ Inc., 1984a; Highland Soils Engineering, Inc., 1986; Dames and Moore, 1987; Leighton and Associates, 1990a, 1990b). The Riverside County Soil Survey (U.S. Department of Agriculture, 1971) classifies soils in the Calimesa area into the Badland-San Timoteo, Hanford-Tujunga-Greenfield, and Tolhouse-Sheephead-Crafton associations. These soils are generally sandy. However, soils developed on older alluvium and the San Timoteo Formation may have well-developed clay-rich (argillic) horizons that may be expansive within about five feet of the surface. Site specific studies should be conducted prior to construction to determine the expansion potential of the soils underlying a site.

## **FLOOD AND INUNDATION HAZARDS**

A 100-year flood event is that flood with a probability of occurring once every 100 years, or that has a 1/100 chance of occurring in any one year. Smaller-scale flooding, generally associated with overburdened storm drain systems can damage property and hinder emergency activities, such as fire department access to fire hydrants, or evacuation. Consequently, the potential for more

## EXHIBIT 5-5 SLOPE INSTABILITY





frequently-occurring, small scale flooding is also assessed herein. Potential flooding hazards due to the failure of dams and other water retention structures are also discussed.

### **Storm Flooding**

The San Gorgonio Pass and its northwestward extensions, the Beaumont Plain and San Timoteo Badlands, are flanked by the San Jacinto Mountains on the west, and by the San Bernardino Mountains on the east. These mountains, especially the San Jacinto's, act as a rain shadow, limiting significantly how much it rains to the east of them. Most precipitation in this part of Southern California occurs in the winter months, between December and March. However, high intensity, short duration tropical storms emanating from the south and northwest typically occur in the summer months. Annual precipitation in the City ranges between 17 inches and 39 inches, with the higher altitude areas generally receiving between 30 and 39 inches, and the lower elevation areas receiving between 17 and 30 inches. Runoff is drained by several southwest-flowing drainages tributary to San Timoteo Creek that extend across the city of Calimesa. These tributaries are ephemeral, with rain water in the upper reaches generally infiltrating into the alluvium so that runoff decreases downstream. San Timoteo Creek drains northward into the Upper Santa Ana River, and on to the Pacific Ocean.

The City of Calimesa has recently adopted a comprehensive Master Flood Control and Drainage Plan prepared by Robert H. Born Consulting Engineers (1992). The County of Riverside has participated in the National Flood Insurance Program (NFIP) since 1980. Portions of what is now the City of Calimesa were mapped in 1980 by the Federal Insurance Administration (FIA) to delineate areas vulnerable to flooding from 100- and 500-year flood events (Community Panel No. 060245 0785 A). Soon after incorporating in 1990, the City of Calimesa filed a request with the FIA and was granted approval to participate in the NFIP. Calimesa has been registered in the NFIP since December 1990. Since then, sections of the City have been re-mapped by the FIA. The new Flood Insurance Rate Maps for the City were not available at the time this document was prepared. The 1980 Flood Insurance Rate Map for the Calimesa area shows the 100- and 500-year flood areas along Garden Air Golf Course Wash. These flood boundaries are shown on Exhibit 5-6.

Most potential flooding problems in the City are related to the inadequacy of the existing drainage devices. Culverts through the Interstate 10 were designed and built in the 1950's to prevent inundation of the freeway lanes from a 100-year storm. However, due to increased urbanization, and therefore, increased runoff, these devices are presently inadequate to channel runoff from a 100-year storm. Ponding behind inadequate freeway culverts could result in inundation of private properties. Robert H. Born Consulting Engineers (1992) have emphasized the following drainage problems in the City:

- As a result of rapid urbanization of the southern portions of Yucaipa, along County Line Road, the existing improved Calimesa Channel has a limited capacity to divert runoff in the northern portions of the City of Calimesa. The channel could overtop during a large-scale flooding event.

- The unimproved portions of Calimesa Channel, between Fifth Street and the Interstate 10, pose a serious flooding threat to the residential and commercial facilities located near the intersection of County Line Road and Calimesa Boulevard.
- The existing 24-inch and 30-inch diameter culverts through the Interstate 10, at the lower end of Avenue L, are inadequate to channel flows from a 100-year storm and larger events. The entire area along Avenue L, between Calimesa Boulevard and the Interstate 10, could be inundated as a result of the inadequate capacity of these culverts and associated inlets.
- The inlet capacity of the culverts through Interstate 10 at the lower ends of the Calimesa Channel, Garden Air, Singleton Road, and Cherry Valley drainage areas is inadequate. These facilities should be upgraded.

The Calimesa Channel was constructed to provide protection to adjacent properties from flood runoff resulting from a 100-year flood event. The City of Calimesa master flood control and drainage plan stipulates that 100-year floods shall be contained within street right-of-way limits, and that 10-year flood runoff shall be contained within the top of curbs (see Exhibit 5-7). If either condition is exceeded, a storm drain or channel is required. The Master Flood Control and Drainage Plan is being considered as part of the Flood Control and Drainage Element of the Calimesa General Plan. Culverts through the Interstate 10 freeway should be upgraded to pass water from a 100-year storm safely.

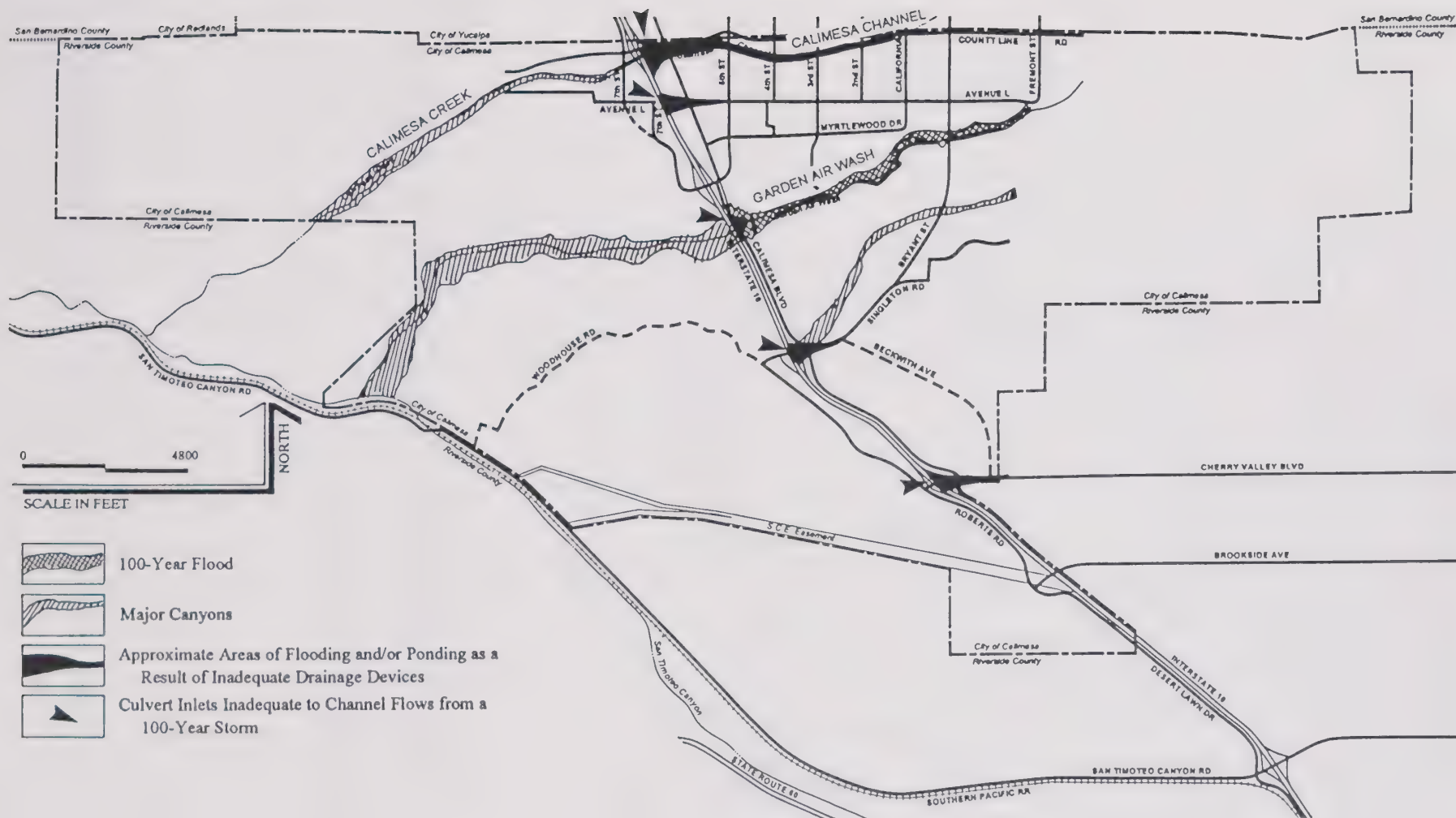
Storm-induced flood problems in the City, as defined by the NFIP, would include flash floods in the canyon areas, saturated mudflows on hillsides, and shallow flooding of streets and residences associated with poor storm drainage. Exhibit 5-6 shows the location of the major flood-prone canyons in the City.

**Private Drainage:** The importance of adequate drainage devices on developed hillside lots is needed. Channeling drainage away from slopes to maintained storm drains prevents erosion and minimizes the chance of shallow mudflows on graded slopes. If improperly maintained, private drain systems can also overflow and channel sheet flow or mud into a residence.

Residential drainage often ties into larger storm drain systems where they are emptied into natural drainages such as canyon areas. Paved concrete channels or flood velocity reduction structures are sometimes necessary in natural drainages to prevent erosion caused by the channeled runoff. Erosion is not only unsightly, but can undermine adjacent slopes and make them unstable.

Many of the soils in the Calimesa area have a high erosion potential. Significant hillside erosion can also occur following a wildland fire. Debris-laden floods emanating from recently-burned slopes during the early winter rains can result in large amounts of sediments deposited in the channels draining the area. To mitigate this hazard, runoff of unimproved areas needs to be controlled and channeled to adequate drainage facilities. Slopes can be protected from erosion by covering them with drought-resistant vegetation. Other erosion control measures that can be used to control slope erosion include rip-rap, gabions, and concrete lining.

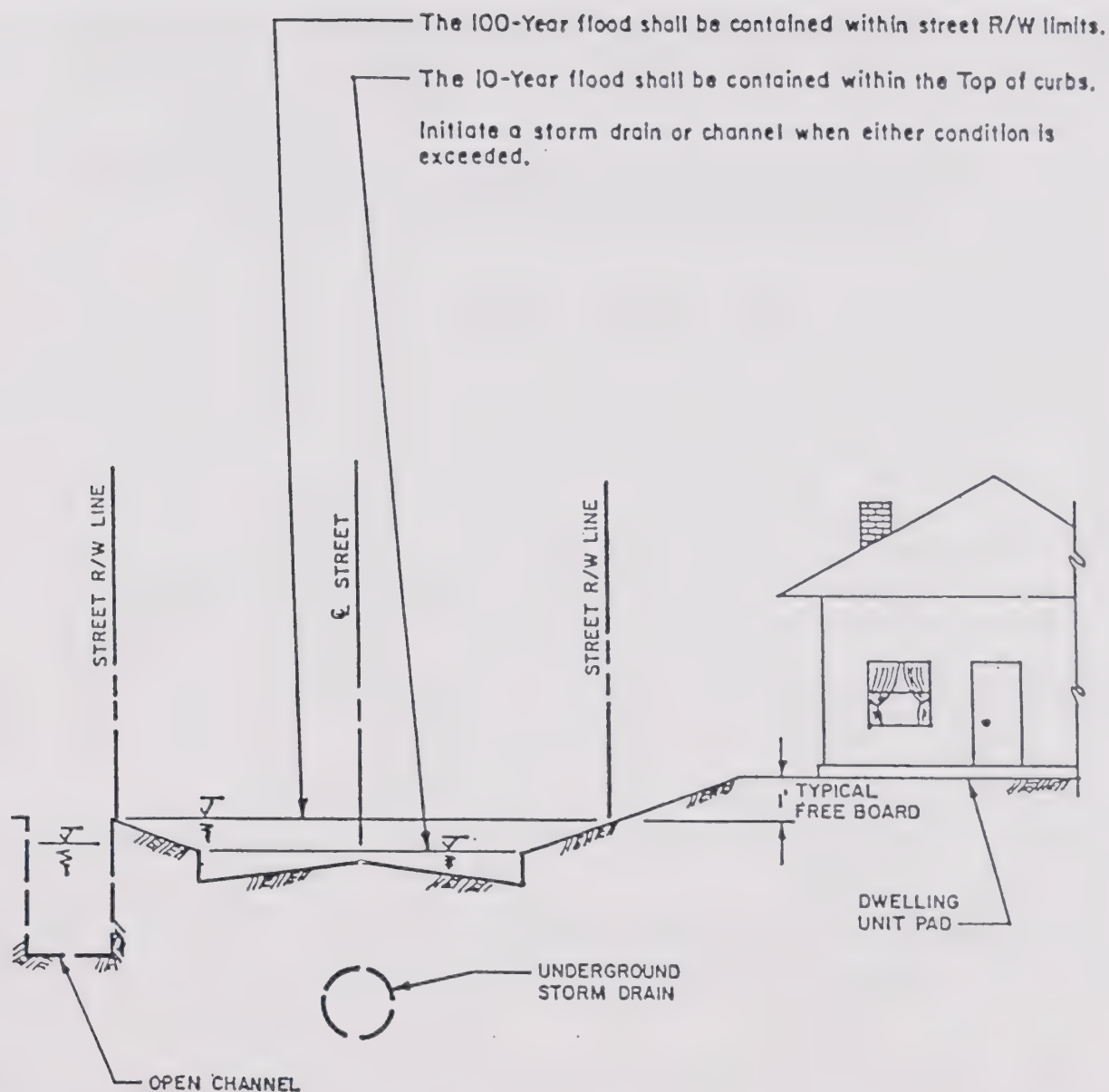




SOURCE: Leighton and Associates, Inc.







**NOTES:**

Protection criteria shown are the City's typical minimum requirements. Special conditions, or other authorities may require stricter controls; i.e., for reasons of traffic or pedestrian safety, maintenance problems behind curbs, etc.; lower maximum depths of flow in streets may be required. Also see Riv. Co. Ord. No. 460 as adopted by the City of Calimesa.

SOURCES: RCFC & WCO HYDROLOGY MANUAL  
ROBERT H. BORN CONSULTING ENGINEERS, 1992.

SOURCE: L & A





**Storm Drain System:** The Riverside County Flood Control and Water Conservation District maintains the storm drain system in the City of Calimesa. Storm drains are usually designed to convey ten-year frequency storm flows, floods that are expected to be equaled or exceeded once every ten years. Storm drainage requirements are designed to prevent floods from rising above the curbline and beyond the right-of-way. Curbline inundation is not a direct threat to public safety. However, if access to a fire hydrant is hindered by street inundation, fire fighting capability can be indirectly affected. Street circulation is also hampered, which in an emergency is vital.

Sheet flow along small, local or private roads in the City is conveyed to storm drains or catchment basins. Minor flooding along such routes can generally be tolerated until a flood or safety issue is posed. If system performance is substandard, either as indicated by County studies or complaints from the residents, the City can contract with the County to correct the problem.

### **Seismically-Induced Inundation**

Seismically-induced inundation refers to flooding as a result of water retention structures failing during an earthquake. There are no major reservoirs in the City or upstream of the City that may be subject to failure. However, culverts, levees, retention basins, and other flood control works may crack and suffer some structural damage during an earthquake, especially in areas prone to ground failure. These facilities could pose an inundation hazard if they contain water at the time of the seismic event, or if they are not repaired soon after an earthquake, and prior to next wet season.

Seismically-induced flooding can also occur as a result of seiching. Seiches are waves triggered by long-period ground motions in enclosed or semi-enclosed bodies of water, such as lakes, reservoirs, and harbors. In the Calimesa area, there are several small reservoirs, or ponds, used for stock water and/or wildlife management (Michael Brandman Associates, 1988). These reservoirs may be susceptible to seiching, with resultant small-scale, localized flooding, if the structures contain water at the time of an earthquake. Michael Brandman Associates (1988) estimate that the maximum height of the waves generated in these reservoirs would be approximately 1.5 feet.

Earthquake-induced waves can cause significant structural damage to above-ground water tanks if not adequately braced and baffled. Sloshing water can lift a water tank off its foundation, and buckle the bottom of the tank. Pipes connected to the tank can be sheared off. There are several above-ground water tanks in the Calimesa area. If these water tanks are damaged during an earthquake, efforts to suppress earthquake-induced fires in the City could be hindered. Damaged tanks and water mains can also limit the amount of water available to residents.

## **FIRE HAZARDS**

Presently, existing development in the City of Calimesa is mainly confined to the area bounded by County Line Road to the north, Interstate 10 to the west, Singleton Road to the south, and Holmes Street to the east. Medium and high density residential areas comprise less than 18 percent of the City's acreage; commercial and light industrial areas total an additional four percent. Undeveloped, open areas in the City, including the proposed Oak Valley project, comprise almost 60 percent of

Calimesa's acreage. The demographic characteristics of the City control to a large extent the type, size, and distribution of fires that occur in the City, and therefore, the personnel and equipment required to service the area. Development of the Oak Valley project, with resultant increase in population, and decrease in open land, will change the statistics presented herein.

Although structural and brush fires are most often caused by accidental and deliberate human means, this section focuses on brush and earthquake-related fire potential, as well as fire prevention standards employed in the City. It is important to emphasize that immediately following an earthquake, the availability of fire suppression resources may be limited because fire department personnel may be providing rescue, emergency medical, and evacuation services.

### **Fire Suppression Capabilities**

**Available Services:** The City contracts with the County of Riverside Fire Department for fire suppression services. County Fire Station No. 21, located at 906 Park Avenue, in the City of Calimesa, services the City, and is commonly able to respond to an emergency or fire in an average time of less than five minutes. Response time for more distant areas within City limits is about ten minutes or less (Captain M. Bean, personal communication, 1993).

According to Fire Captain M. Bean (personal communication, 1993) fire suppression and emergency resources available to the City and housed in Station No. 21 include two (2) engine units, and one (1) squad vehicle. One of the engine units and the squad vehicle are manned by volunteer personnel. The volunteer personnel carry pagers set to the same radio frequency as the system through which the dispatch calls come through. If the volunteers are available when an emergency call is received, they respond.

Five other stations in the area are also able to provide additional resources if needed. These are the stations in Yucaipa, Crafton Hills, Cherry Valley, and two (2) California Department of Forestry stations in Beaumont. Station No. 58 in Moreno Valley can also provide assistance if needed. Which neighboring station(s) respond to an emergency call in Calimesa depends on where in the City the emergency occurs. For an emergency in the northern part of the City, the Yucaipa station is most likely to respond. If the call is for the southern end of town, the stations in Cherry Valley or Beaumont are more likely to be called in first to assist the local fire station.

The County of Riverside Fire Department does not provide paramedic services. In Calimesa, paramedic assistance services are provided by a private ambulance company, and on occasion, as requested by Calimesa's Fire Captain, by the City of Yucaipa's paramedic program (Captain M. Bean, personal communication, 1993).

Brush management of vegetation adjacent to buildings is an important element of fire prevention. Minimum requirements may include managing combustible growth within 100 feet of structures, including clearance of hazardous flammable vegetation for a distance of 30 feet around the building perimeter. Additional standards and regulations are found in the Uniform Fire Code, and in Riverside County Ordinance No. 546.



**Water Supply:** The National Board of Fire Underwriters recommends that communities have a three-day supply of water that they can tap into in case of an emergency, such as an earthquake. Approximately 90 percent of the water used in the City of Calimesa is supplied by the South Mesa Water Company, the rest, by the Yucaipa Valley Water District. Most of the water used in the Calimesa area is pumped from local water wells. The pumps generally are electric-powered. Power failure during an earthquake could result in insufficient water available for fire suppression. The South Mesa Water Company has a few back-up wells that are pumped with gas-operated equipment. They are also considering purchasing a vehicle-mounted back-up generator that they can move from one well to another to extract emergency water (Mr. D. McClellen, personal communication, 1993).

The South Mesa Water Company has four above ground water tanks that have a combined 4.5 million gallon reservoir capacity. One of these tanks is located near the intersection of Fourth Street and H Avenue; the other three are located along County Line Road. The water company tries to keep these tanks full, but the actual amount of water stored varies seasonally, based on demand. During the summer months, when they may deliver over 3 million gallons of water a day, they may not be able to maintain the tanks at full capacity. All of the tanks are gravity fed. The holding tanks were structurally reinforced in 1960. Since then, they have been relined twice, and new roofs put on them (Mr. D. McClellen, personal communication, 1993).

Potential losses in water pressure due to breaks in the water distribution system can be caused by corrosion of cast-iron pipelines, damage to pipes during projects requiring excavation near utility lines, and earthquake-related ground failure. In Calimesa, many of the older pipes, some dating to around 1912, when the South Mesa Water Company was founded, have leaks that result in a high friction loss. According to Mr. D. McClellen of South Mesa Water Company (personal communication, 1993), the company schedules pipe replacement projects annually. Old pipes are being replaced with PVC Class 900 pipes, rather than with steel or cement pipes. However, old pipes are spaced throughout the water distribution system, so that replacement of all of the old pipes will take time. For example, many of the older pipes that originally serviced orchards were tied into the main water system and are now being used to provide water to residential areas because it was economically feasible to do so at the time.

### **Brush Fire**

Data from the Fire Department indicate that of 1,240 calls for service that Station No. 21 received in 1992, only 45 calls (3.6 percent) were for fires. Roughly half of the fires were structural, the rest occurred either in vacant lots, or in open wildland (Captain M. Bean, personal communication, 1993). Most structural fires in Calimesa occur in residential buildings. Structures located adjacent to or surrounded by brush areas are at a higher risk of being impacted by a brush fire.

Open space and canyon areas in the City are covered with chaparral, coastal sage scrub, deciduous woodlands, and grasslands. Introduced vegetation include landscaping plants, and agricultural species. The chaparral and coastal sage plant communities are highly combustible due to the volatile oils contained in the plant tissues. Generally, brush fires are more likely to occur in the dry, summer months.



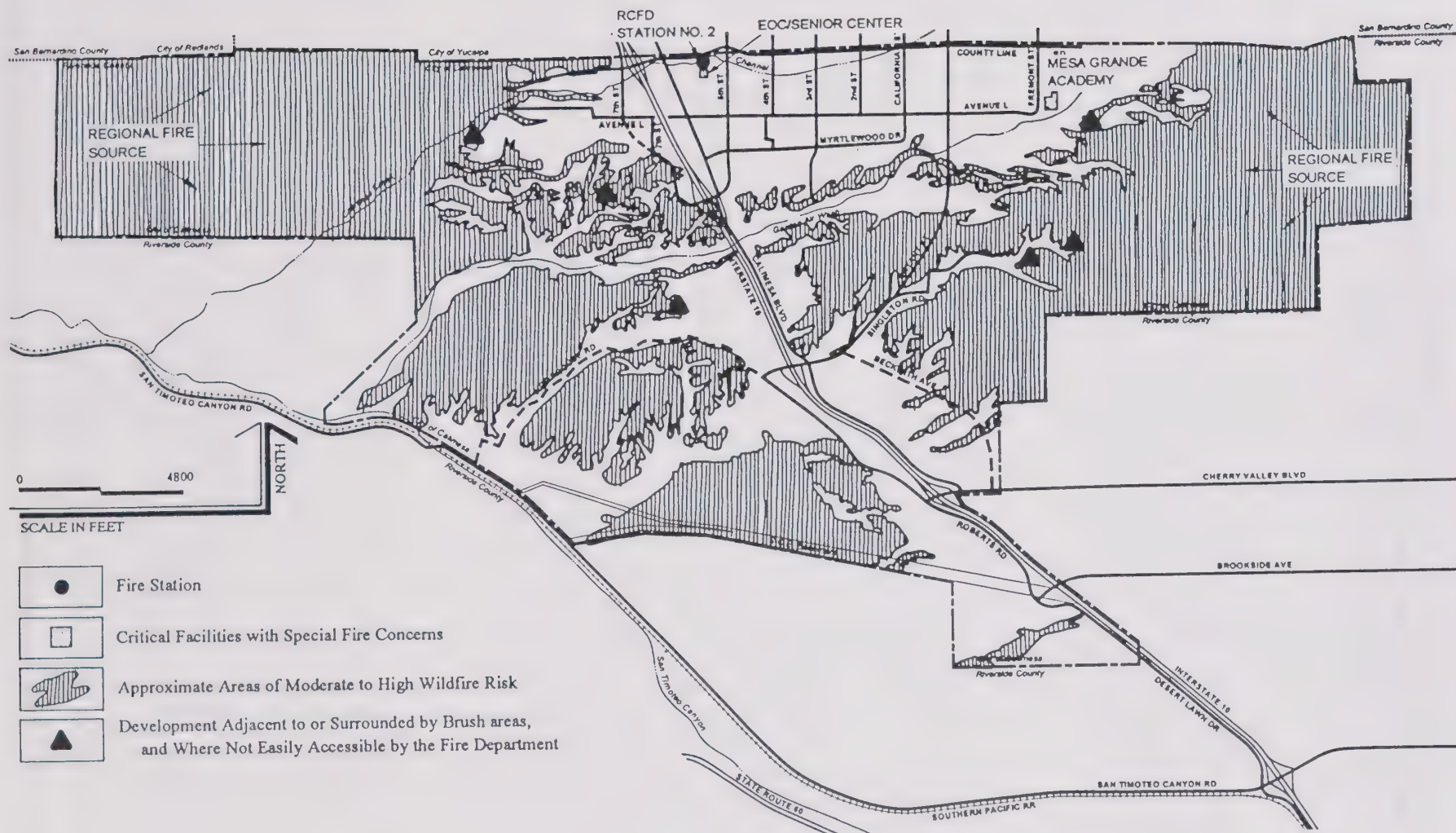
Certain areas of the City are more susceptible to brush fires than others. Strong winds blow through the San Gorgonio Pass, funneled by the mountains to the east and west. The residential fires that occurred in 1990 in Glendale and Santa Barbara, and in 1991 in Oakland, illustrated how multiple ignitions can tax normal fire fighting resources and lessen response times to individual fires. If fire occurs during strong winds, "branding" of wind transported embers outward a mile or more from the fire could ignite combustible roofs and awnings. Exhibit 5-8 shows relative fire risk based on the location and proximity of development to dense areas of volatile vegetation, ease of access by road for fire suppression, and relative steepness of the terrain. However, the more developed portions of the City, next to the County line, are shielded from strong winds by the surrounding hills (Captain M. Bean, personal communication, 1993). The spread of fire is controlled by the type of construction materials and building density, width of fire breaks, presence of flammable materials, wind conditions, water supply, time it takes for fire department to respond, and availability of fire fighting resources.

Most roofs in Calimesa are of composite asbestos and/or asphalt shingle construction. A few houses have wood-shake roofs. Wood-shingle roofing is a particularly fire-prone construction material. The city of Calimesa follows the roofing standards set by Riverside County. Presently, the County enforces a Class B or better roofing ordinance for residential structures, and Class A for commercial buildings.

### **Earthquake-Induced Fire**

The threat of earthquake-induced fire is emphasized because widespread fires following an earthquake, coupled with strong winds, constitute a worst-case fire suppression scenario. For example, most of the damage during the 1906 San Francisco earthquake was the result of fire. If underground water mains are damaged during an earthquake, the resultant lack of water pressure could compound the risk of fire. In addition, if several fires occur at about the same time, the local fire stations could be overwhelmed very quickly. The conscientious implementation of fire prevention programs to reduce the hazard of earthquake-induced fire is therefore the best solution.

The principal causes of earthquake-related fires include open flames, electrical malfunctions, gas leaks, and chemical spills. Commonly affected are unanchored gas heaters or gas-fired hot water heaters, appliances which tend to tip over and damage rigid gas line connections during strong ground shaking. Given the residential setting of Calimesa, damaged gas line connections, overturned appliances, and damaged electrical circuitry will be the most likely cause of earthquake-induced fires, if any, in the City. Fires during an earthquake can also be caused by damaged, leaking gas mains, valves and connections in the primary transmission and distribution gas system. Strong ground motion, surface rupture and ground failure can cause many sections of pipe to be damaged. Gas distribution pipelines can be replaced with plastic polyethylene pipes that are more flexible, and therefore, relatively more resistant to breakage. Additional protection can be provided if sections of the gas distribution system can be isolated and shut-off during an emergency.



SOURCE: Leighton and Associates, Inc.





Power lines downed during an earthquake, as well as by strong winds, can also start brush fires. To prevent such an occurrence, power lines are designed to automatically deenergize if there is a break in the system. Keeping vegetation cleared from under transmission routes can also help to reduce the risk of fire.

## HAZARDOUS MATERIALS

The State of California defines a hazardous material as a substance that is toxic, ignitable or flammable, or reactive and/or corrosive. An extremely hazardous material is defined as a substance that shows high acute or chronic toxicity, carcinogenicity, bioaccumulative properties, persistence in the environment, or is water reactive (California Code of Regulations, Title 22). This section will concentrate on the hazards associated with the use, storage or manufacturing of hazardous materials in or near the City of Calimesa.

The primary concern associated with the release of a hazardous material is the short and long term effects that exposure to a hazardous substance may have on the public. This is particularly true when a toxic gas is involved, since a gaseous toxic plume is more difficult to contain than a solid or liquid spill, and a gas can impact a larger segment of the population in a shorter time span.

All businesses that handle more than a specified amount of hazardous materials are required by both the Federal and State governments to submit a business plan to their local administering agency (the reportable quantities are 50 or more gallons of a liquid, 500 pounds or more of a solid, or 200 cubic feet or more of a gas at standard temperature and pressure; quantities for acutely hazardous materials vary according to the substance). In Calimesa, the administering agency is the County of Riverside Department of Environmental Health, Hazardous Materials Division (Ms. J. Montez, personal communication, 1993). Every handler is required to submit a business plan and an inventory of hazardous substances and acutely hazardous materials to the County of Riverside Department of Environmental Health, Hazardous Materials Division on a yearly basis. If the hazardous materials inventory of a business should change, a revised business plan must be submitted. Inspectors from the County of Riverside Department of Environmental Health, Hazardous Materials Division conduct yearly inspections of businesses that have submitted a business plan and conduct follow up inspections as needed.

Most chemicals used have their own unique physical and chemical characteristics; what might be an acceptable mitigation procedure for one chemical may be totally inadequate for another. Therefore, business plans should contain, for each hazardous and extremely hazardous material handled, a description of the physical and chemical properties of the material, and the symptoms that result from contact with the material. The plan should also have a site map that shows where each hazardous material is stored and handled, where emergency response equipment is located, and evacuation plans and procedures. The County of Riverside Department of Environmental Health, Hazardous Materials Division maintains a data base that contains the business plans submitted by businesses within Calimesa. Business plans are designed to be utilized by the Fire Department in the event of a hazardous materials incident to allow for quick and accurate evaluation of each situation for appropriate response. The County of Riverside Department of Environmental Health, Hazardous

Materials Division is responsible for distribution of hazardous materials information to the appropriate fire departments and emergency response teams in the Calimesa area. Employees of facilities that use, store or manufacture hazardous materials should be aware of where a copy of the business plan is kept, and how the plan is put into operation should a hazardous material incident occur.

Although significant concentrations of hazardous materials, at levels for which a business plan is required, are generally associated with manufacturing and industrial areas, hazardous materials are also used and stored in commercial and residential areas. Most of Calimesa is currently zoned for residential use. The primary industrial and commercial areas of the city occur along Interstate 10, County Line Road, and Calimesa Boulevard and Fifth Street (Riverside County Fire Emergency Services Division, 1992). This area includes retail stores, restaurants, gasoline stations, auto repair, and other service businesses. A list of businesses that have submitted a business plan was requested from the County of Riverside Department of Environmental Health, Hazardous Materials Division. Seven businesses appear on the "Disclosure List" for the City of Calimesa. These businesses and their addresses are listed in Table 5-3. There are 13 businesses that appear on the "Generator List" for the City of Calimesa. These businesses are listed in Table 5-4.

**TABLE 5-3  
DISCLOSURE LIST, CITY OF CALIMESA**

<b>Business Name</b>	<b>Street Address</b>
Arco Service Station/AM/PM Mini Market #1958	1216 Calimesa Boulevard
Accurate Auto Repair	941 Calimesa Boulevard
Calimesa Auto Repair	530 West Avenue "L"
Milt's Body Works	640 West Avenue "K"
Sav-Mor Oil Company	1198 Calimesa Boulevard
Shell Calimesa	1213 Calimesa Boulevard
South Mesa Water Company	391 West Avenue "L"

**TABLE 5-4  
GENERATOR LIST, CITY OF CALIMESA**

<b>Business Name</b>	<b>Street Address</b>
4 M Company	1095 Calimesa Boulevard
Accurate Auto Repair	941 Calimesa Boulevard
B & Y Machine Company	1060 Fifth Street
Calimesa Auto Repair	530 West Avenue "L"
D & D Machine Service	509 West Avenue "L"
L & S Garage	623 Avenue "K"
McDaniel's Garage	367 West County Road
Milt's Body Works	640 West Avenue "K"
Mixon's Discount Septic Tank/Drill	946 Calimesa Boulevard
Shell Calimesa	1213 East Calimesa Boulevard
Troyce's Automotive	625 West County Line Road
Unocal Dave's Portech Service	655 West County Line Road
Vinsant Plating	509 Avenue "L"



A review of the California Integrated Waste Management Board's Closed and Inactive Landfills and Active Landfills lists did not indicate the presence of closed and inactive or active landfills in the City of Calimesa or within two miles of the City limits. A review of the Report on Releases of Hazardous Substances from Underground Storage Tanks (California Environmental Protection Agency, 1992) indicated the presence of only one case within the City of Calimesa. This leaking underground storage tank was located at Arco Service Station #1958 at 1216 Calimesa Boulevard and involved leaking premium gasoline that affected the underlying soils. This case has been signed off and no remedial action has been deemed necessary. There are no public water supply wells within the City limits of Calimesa that are listed as containing volatile organic chemicals (Regional Water Quality Control Board, 1991). No Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites are listed within the City limits of Calimesa (United States EPA, 1991).

### **Hazardous Materials Incidence Response**

The County of Riverside Department of Environmental Health, Hazardous Materials Division, and County of Riverside Fire Department is responsible for responding to hazardous material release incidents in Calimesa. The nearest County Emergency Response Team is housed at 1550 East 6th Street in Beaumont, approximately 3 miles southeast of Calimesa's southernmost city limit. The County of Riverside Department of Environmental Health, Hazardous Materials Division and Riverside County Fire Department follow the procedures set forth in the County Multi-Hazard Functional Plan revised in 1987 (Ms. J. Ryan, personal communication, 1993).

Agencies of the City of Calimesa manage emergency operations in accordance with their Emergency Action Checklist, Response to a Hazardous Material Incident (Riverside County Fire Emergency Services Division, 1992). This document assigns specific tasks to different City agencies in the event of an emergency.

Releases of hazardous materials may occur during a natural disaster, such as during an earthquake. Improperly-stored containers of hazardous substances may overturn or break, pipelines may rupture, and storage tanks may fail. Containers may also explode if subject to high temperatures, such as those generated by a fire. If two or more chemicals which are reactive when combined come in contact as a result of a spill, the hazard may be compounded. The 1991 Uniform Fire Code includes criteria designed to minimize the risk of an accident. These guidelines are to be followed when storing, using or transporting hazardous materials, and include secondary containment of substances, segregation of chemicals to reduce reactivity during a release, sprinkler and alarm systems, monitoring, venting and auto shutoff equipment, and treatment requirements for toxic gas releases.

In Calimesa, most businesses that handle hazardous and/or acutely hazardous substances in quantities above the reportable limits are located in the commercial area along Interstate 10 and Calimesa Boulevard (see Table 5-4). These businesses are located a minimum of approximately 3 miles and a maximum of 7.5 miles from the Riverside County Hazardous Materials and Riverside County Fire Department Emergency Response Teams located at 1550 East 6th Street in Beaumont. Emergency



Response Teams will, in an ideal situation, be able to respond to an incident in 15 to 20 minutes (Ms. J. Ryan, personal communication, 1993).

Presently the Discount Septic Tank Company on Calimesa Boulevard (Mixon's Discount Septic Tank/Drill) houses muriatic acid. Other businesses and industrial facilities located outside the city limits of Calimesa have the potential of causing a hazardous materials release incident that may impact the City. These include the JM Ney Company and Jorco Chemical Company located within two miles of the City. Hazardous materials normally stored in warehouses or refineries have the potential for being released during an earthquake or fire as toxic fumes. Whether a toxic fume released by any of these facilities would impact Calimesa is in part dependent upon wind direction and other climatological controls. There are many pipeline distribution systems which transect Calimesa, specifically water, natural gas, and petroleum products.

Calimesa's proximity to rail and highway transportation routes poses the potential for spills or leaks from transport of hazardous materials. Interstate 10 and Calimesa Boulevard are heavily traveled by trucks that carry many types of hazardous materials including, but not limited to, gasoline, rocket fuels, pesticides, and radioactive materials. Transportation of chlorine is of particular concern to Calimesa because the Metropolitan Water District operates a large fleet of chlorine transport tank trucks. These trucks are in operation daily on Interstate 10. The California Highway Patrol is in charge of spills that occur in or along freeways, with local sheriffs, CALTRANS, and police departments responsible for additional enforcement and routing assistance.

The SPRR railroad line that exists parallel to San Timoteo Canyon Road, just south of the City limits, also carries hazardous cargoes. Although railroad traffic is not as prevalent as that along truck routes, the volume of hazardous materials transported is generally much greater.

## SECTION 6: NOISE

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### INTRODUCTION

The Noise Profile Report discusses the characteristics of noise, the existing noise environment in the City, and stationary and mobile sources of noise. It also provides state and federal guidelines for the control of noise levels and summarizes the City's existing noise ordinance.

Every day, people are subject to a multitude of sounds in the urban environment. Many of these sounds are by-products of day-to-day activities. The type of annoyance produced by sound depends on its loudness, duration, time of day, impulse character, pure tone content, variability, season of the year, and the community. Individual annoyance is relative and variable. Physical health, psychological stability, social cohesion, property values, and economic productivity are factors affected by excessive amounts of noise.

Community noise levels are measured in terms of the A-weighted decibel (dBA). A-weighting is a frequency correction that correlates overall sound pressure levels with the frequency response of the human ear. Additional units of measurement have been developed to evaluate the longer term characteristics of sound. One of the more common noise measurements uses statistical samples in terms of percentile noise levels. For example, the  $L_{10}$  noise level represents the noise level that is exceeded 10% of the time. The  $L_{50}$  noise level represents the median noise level; half the time, noise exceeds this level, and half the time noise is less than this level. The  $L_{90}$  noise level represents the background noise level experienced during 90% of the time. The equivalent noise level ( $L_{eq}$ ) is a single-number representation of the fluctuating sound level in decibels over a specified period of time. It is a sound-energy average of the fluctuating level.

Community Noise Equivalent Level (CNEL) is the noise measurement that represents an average of all measured noise levels obtained over a specified period of time. The  $L_{dn}$  scale represents a time weighted 24 hour average noise level based on the A-weighted decibel. Time weighting refers to the fact that noise during certain sensitive time periods such as the late evening and early morning hours. The CNEL scale includes an additional 5 dB adjustment to sounds occurring in the evening (7:00 p.m. to 10 p.m.) in addition to the 10 dB adjustment to sounds occurring in the late evening and early morning hours (between 10:00 p.m. and 7:00 a.m.).  $L_{dn}$  and CNEL are generally considered to be equivalent descriptors of the community noise environment and are within +/- 1.0 dB. Representative noise sources and sound levels are shown in Exhibit 6-1.

### NOISE REGULATIONS AND STANDARDS

The Federal and State governments have established noise guidelines and regulations for the purpose of protecting citizens from potential hearing damage and various other adverse physiological, psychological, and social effects associated with noise. The Federal government specifically preempts local control of noise emissions from aircraft, railroads, and interstate highways, so as not to impose undue burden on interstate or foreign commerce. Federal agency standards and recommended noise criteria are listed below:

- **Occupational Health and Safety Act (OSHA):** In 1969 and 1970, the Department of Labor established occupational noise regulations through the Walsh Healey Public Contracts Act and set standards for noise exposure for all businesses engaged in interstate commerce through the Occupational Safety and Health Act (OSHA). OSHA standards are described in Table 6-1 below:

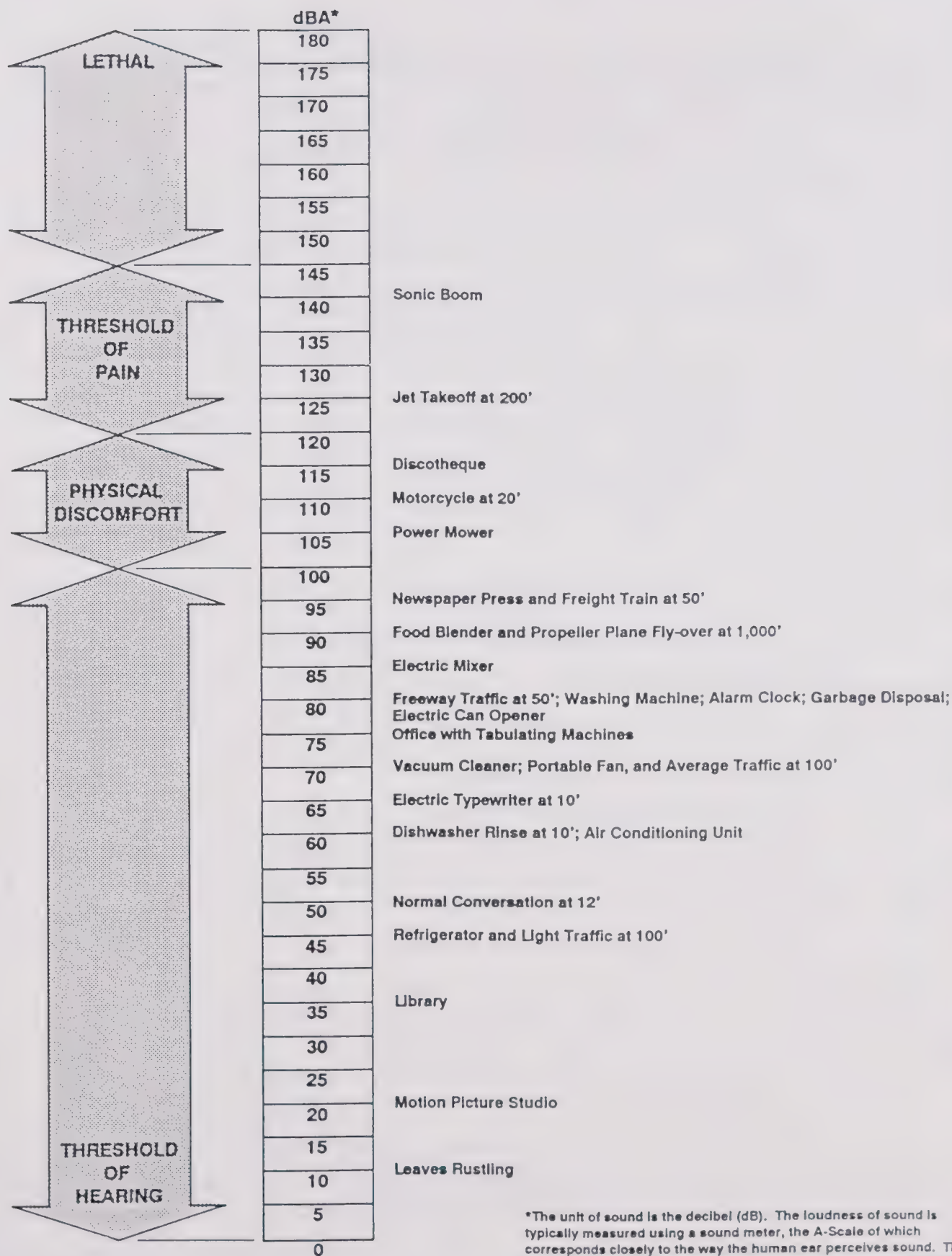
TABLE 6-1 PERMISSIBLE NOISE EXPOSURE IN THE WORKPLACE	
Duration-Hour Per Day	Sound Level, dBA
8	90
6	92
4	95
3	97
2	100
1	105

Source: Department of Labor Occupational Noise Exposure Standards, Code of Federal Regulations, Title 29, Chapter XVII Part 1910, Subpart G, 36 FR10466, May 29, 1971, as amended and corrected through June 19, 1983.

- **Federal Highway Works Administration (FHWA):** The FHWA has established design standards for different land uses. These standards apply to the planning and design of federally-funded highway projects, and are expressed in terms of both Equivalent Noise Level (Leq) and L<sub>10</sub> (see Table 6-2).

TABLE 6-2 NOISE ABATEMENT CRITERIA			
Category	Land Use	Leq, dBA	L <sub>10</sub> , dBA
A	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need, i.e., amphitheaters, parks and open spaces.	57 (Exterior)	60 (Exterior)
B	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, picnic areas, recreation areas, playgrounds, active sports areas, and parks not included in Category A.	67 (Exterior)	70 (Exterior)
C	Developed lands, properties or activities not included in categories A or B.	72 (Exterior)	75 (Exterior)





\*The unit of sound is the decibel (dB). The loudness of sound is typically measured using a sound meter, the A-Scale of which corresponds closely to the way the human ear perceives sound. Thus the sound level for noise evaluations is frequently expressed in dBA.



**TABLE 6-2  
NOISE ABATEMENT CRITERIA**

Category	Land Use	Leq, dBA	L <sub>10</sub> , dBA
D	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals and auditoriums.	52 (Interior)	55 (Interior)

Source: Department of Transportation, Federal Highway Administration Highway Noise Control Standards and Procedures, Title 23, Code of Federal Regulations. Chapter 1, Subchapter J, Part 772, 38, FR 15953, June 19, 1973, as amended through May 29, 1979.

- Department of Housing and Urban Development (HUD):** The Department of Housing and Urban Development (HUD) has adopted environmental criteria and standards for determining project acceptability and necessary mitigation measures to ensure that projects assisted by HUD provide a suitable living environment. The standards include noise limits of 65 dB Ldn for residential areas. HUD standards are detailed in Table 6-3 below:

**TABLE 6-3  
HOUSING SITE ACCEPTABILITY STANDARDS**

Acceptability	Ldn (CNEL)	Special Approvals and Requirements
Acceptable	65 dB and less	None
Normally Unacceptable	65 dB to 75 dB	Special environment clearance and 5 dB additional attenuation for building within 65 to 70 dB Ldn and 10 dB additional attenuation for building within 70 dB to 75 dB Ldn.
Unacceptable	75 dB and greater	Submittal of environmental impact statement.

Source: Department of Housing and Urban Development Environmental Criteria and Standards, Title 24, Code of Federal Regulations, Part 51, issued at 44 FR 40860, July 12, 1979; amended by 49 FR 880, January 6, 1984.

- Noise Control Act:** In 1972, the Noise Control Act, authorized the Environmental Protection Agency (EPA) to publish descriptive data on the effects of noise and establish levels of sound "requisite to protect the public welfare with an adequate margin of safety." These levels are separated into health (hearing loss levels) and welfare (annoyance levels) with an adequate margin of safety (see Table 6-4).

**TABLE 6-4  
RECOMMENDED NOISE LEVELS**

Effect	Level	Area
Hearing Loss	Leq(24) ≤ 70 dB	All areas.



**TABLE 6-4**  
**RECOMMENDED NOISE LEVELS**

Effect	Level	Area
Outdoor activity interference and annoyance	Ldn $\geq$ 55 dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	Leq(24) $\leq$ 55 dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	Leq(24) $\leq$ 45 dB	Indoor residential areas.
	Leq(24) $\leq$ 45 dB	Other indoor areas with human activities such as schools, etc.
Sources: U.S. Environmental Protection Agency, "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety." March 1974.		

- California Motor Vehicle Code:** The State of California has adopted noise standards for areas not regulated by the federal government. State standards regulate noise levels of motor vehicles and motor boats, establish noise impact boundaries around airports, regulate freeway noise affecting classrooms, sound transmission control, occupational noise control, and identify noise insulation standards. The California Motor Vehicle Code sets operational noise limits according to the type of vehicle and date of manufacture. Table 6-5 describes noise limits for the sale of new vehicles. Table 6-6 describes noise standards for vehicle operation at various speeds.

**TABLE 6-5**  
**CALIFORNIA MOTOR VEHICLE NOISE LIMITS FOR VEHICLES**

Sales of New Vehicles	Date of Manufacture	dB(A) Value at 50 Feet
Motorcycles Motorcycles other than motor-driven cycles	Before 1970	92
	After '69, Before '73	88
	After '72, Before '75	86
	After '74, Before '86	83
	After '85	80
Vehicle with a gross vehicle weight of 6,000 lbs. or more	After '67, Before '73	88
	After '72, Before '75	86
	After '74, Before '78	83
	After '77	80
Any other motor vehicle	After '67, Before '73	86
	After '72, Before '75	84
	After '74	80

**TABLE 6-5  
CALIFORNIA MOTOR VEHICLE NOISE LIMITS FOR VEHICLES**

Sales of New Vehicles	Date of Manufacture	dB(A) Value at 50 Feet
Noise level limits for the operation of off-highway motor vehicles	Before '73	92
	After '72, Before '75	88
	After '74	86
Source: California Motor Vehicle Code, 1992.		

**TABLE 6-6  
CALIFORNIA MOTOR VEHICLE NOISE LIMITS FOR VEHICLES**

Operation of Vehicle	Less than 35 mph <sup>1</sup>	36 to 45 mph <sup>2</sup>	Over 45 mph <sup>2</sup>
Any motor vehicle with a manufacturer's gross vehicle weight rating of 6,000 pounds or more and any combination of vehicles towed by such a motor vehicle.	82 dBA	--	--
Any motor vehicle with a manufacturer's gross vehicle weight rating of 10,000 pounds or more and any combination of vehicles towed by such a motor vehicle.	--	86 dBA	90 dBA
Any motorcycle other than a motor driven cycle.	77 dBA	82 dBA	86 dBA
Any other motor vehicle and any combination of vehicle towed by such motor vehicle.	74 dBA	76 dBA	82 dBA
<sup>1</sup> On Streets with a grade not exceeding plus or minus 1 percent. <sup>2</sup> On any street. Source: Excerpts from the California Motor Vehicle Code, 1988.			

- **California Streets and Highway Code:** Division 1, Chapter 1, Article 6 of this code requires State-funded noise abatement programs for freeway construction or any use which will result in noise levels exceeding 55 dBA L<sub>10</sub> or 52 dBA Leq at existing classrooms, libraries, multi-purposes rooms, and spaces used for pupil personnel services of a public or private elementary or secondary school. The noise abatement program may include installing acoustical materials, eliminating windows, installing air conditioning, or constructing sound buffer structures or other measures.
- **Sound Transmission Control Standards:** The California Administration Code, Title 24, Building Standards, Chapter 2.35 outline noise insulation performance standards to protect persons within new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings. It requires an interior noise level of 45 dB CNEL or less for residential projects. For residential buildings or structures within the 60 dB CNEL of an airport, or vehicular or industrial noise source, an acoustical analysis must be made to show compliance with the standards.

Noise standards in Title 21, Public Works, Chapter 25, Division of Aeronautics, of the same code require compatible land uses within a criterion CNEL contour for airports. Compatible and incompatible land uses have been identified for areas within an airport's 65 dB CNEL. Occupational Noise Control Standards are also found in Title 8, Industrial Relations, Chapter 4 of the state Administrative Code. It provides permissible noise level exposure at the workplace in terms of permitted hours per workday. Noise and land use compatibility is defined as follows:

1. Incompatible land uses within the 65 dB CNEL include:

- Single-family dwellings
- Multiple-family dwellings
- Trailer parks
- Schools of standard construction
- Hospitals

2. Compatible land uses within the 65 dB CNEL include:

- Agricultural
- Airport uses
- Industrial uses
- Commercial uses
- Open space
- High-rise apartments in which adequate protection against exterior noise has been included in the design and construction, along with a central air conditioning system. Adequate protection means the noise reduction (exterior to interior) shall be sufficient to assure that interior community noise equivalent level in all habitable rooms does not exceed 45 dB during aircraft operations.

- **California Occupational Noise Control Standards:** The California Code of Regulation, Title 8, Industrial Relations, Chapter 4, as revised and effective September 28, 1984, outlines permissible noise exposure at a workplace, as shown in Table 6-7.

TABLE 6-7 CALIFORNIA OCCUPATIONAL NOISE CONTROL STANDARDS	
Sound Level dB(A)	Permitted Hours of Exposure Per Weekday
90	8
95	4



LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L <sub>dn</sub> OR CNEL, dB					
	55	60	65	70	75	80
RESIDENTIAL-LOW DENSITY SINGLE FAMILY, DUPLEX MOBILE HOMES						
RESIDENTIAL- MULTI FAMILY						
TRANSIENT LODGING- MOTELS, HOTELS						
SCHOOLS, LIBRARIES CHURCHES, HOSPITALS, NURSING HOMES						
AUDITORIUMS, CONCERT HALLS, AMPITHEATRES						
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS						
PLAYGROUNDS, NEIGHBORHOOD PARKS						
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES						
OFFICE BUILDINGS, BUSINESS, COMMERCIAL AND PROFESSIONAL						
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE						

## LEGEND



## NORMALLY ACCEPTABLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



## CONDITIONALLY ACCEPTABLE

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.



## NORMALLY UNACCEPTABLE

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.



## CLEARLY UNACCEPTABLE

New construction or development should generally not be undertaken.

## CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE

## A. NORMALIZED NOISE EXPOSURE DESIRED

Where sufficient data exists, evaluate land use suitability with respect to a 'normalized' value of CNEL or L<sub>dn</sub>. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L<sub>dn</sub>.

## B. NOISE SOURCE CHARACTERISTICS

The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65dB CNEL criterion wherever possible and in order to facilitate the ability of airports to comply with the Act, residential uses located in Community Noise Exposure Areas greater than 65dB should be discouraged and considered located within normally unacceptable areas.

## C. SUITABLE INTERIOR ENVIRONMENTS

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L<sub>dn</sub>. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

## D. ACCEPTABLE OUTDOOR ENVIRONMENTS

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered 'normally acceptable' for that land use category, may be appropriate.



TABLE 6-7 CALIFORNIA OCCUPATIONAL NOISE CONTROL STANDARDS	
Sound Level dB(A)	Permitted Hours of Exposure Per Weekday
100	2
105	1
110	0.5
Source: California Code of Regulation, Title 8, Industrial Relations, Chapter 4, as revised and effective September 28, 1984.	

- **Land Use Compatibility:** The State Office of Noise Control has prepared "Guidelines for the Preparation and Content of Noise Elements of the General Plans." This provides a guide for land use compatibility of noise sensitive land uses in areas subject to noise levels of 55 to 80 dB CNEL or Ldn. Residential uses are normally unacceptable in areas exceeding 70 dB CNEL and conditionally acceptable between 55 and 70 dB CNEL for low density single family, duplex, mobile homes, and between 60 and 70 dB CNEL for multi-family units. Schools, libraries, hospitals, and nursing homes are treated as noise sensitive land use requiring acoustical studies within areas exceeding 60 dB CNEL. Commercial/professional office buildings and industrial land uses are normally unacceptable in areas exceeding 75 dB CNEL and are conditionally acceptable within 67 to 78 dB CNEL (for commercial/professional offices) and 70 to 80 dB CNEL (for industrial land uses). Golf courses are normally unacceptable in areas exceeding 70 dB CNEL. However, the state stresses that these guidelines can be modified to reflect community sensitivities to noise. Exhibit 6-2 shows noise compatibility for various land uses.
- **Calimesa Noise Ordinance:** The City of Calimesa has developed standards for noise in its Noise Ordinance. The ordinance states that single and low-density residential zones (including R-1, R-T, R-2, RR, and SP) shall not be subject to noise levels greater than 50 dB; multi-family residential uses (including R-3, SP, and PRD) to noise levels greater than 55 dB; commercial uses to levels greater than 60 dB; and manufacturing uses to levels greater than 70 dB. It also states that from 10 p.m. to 7 a.m., single family and low residential zones should have ambient noise levels of 40 dB, and multi-family zones an ambient noise level of 45 dB. The City Manager has the primary responsibility for the enforcement of these standards.



## EXISTING NOISE ENVIRONMENT

Stationary noise sources in Calimesa are concentrated in the manufacturing and commercial area between Interstate 10 and Calimesa Boulevard. Industrial activities may result in high noise levels when machinery is in operation. Commercial and business activities, clients and patrons are the main sources of noise along the Calimesa Boulevard commercial corridor. Residential areas contribute resident gatherings and activities, vehicles and operating household equipment to the ambient noise environment. Schools create their own type of noise from buses, students, school activities, and outdoor games.

Certain activities are particularly sensitive to noise. These include sleeping, studying, reading, leisure and other activities requiring intense concentration. Hospitals and convalescent homes, churches, libraries, schools, and child care facilities are considered noise-sensitive uses and are best located away from noise sources. Residential areas are also recommended away from noise-impact areas. In Calimesa, the noise sensitive uses of Mesa Grande Academy and child care facilities, churches, the Calimesa library, and residential areas are not found near the Interstate 10 and thus, no exposure to vehicular noise from the freeway. Residential developments and mobile home developments are located along County Line Road, Calimesa Boulevard and Avenue L West, three of the City's major thoroughfares and may be subject to vehicular noise throughout the day.

### Community Noise Survey

A community noise survey was conducted by David Evans and Associates on January 20, 1993 between 10 a.m. and 2 p.m. to document the existing noise environment. Seven locations were selected for the surveys and noise was metered for a 10-minute interval at each site. The noise measurement results are representative samples of developed residential, commercial, and light industrial areas. The noise measurement results should be used as a general guideline or indication of noise levels within the community. A summary of the noise measurements are shown in Table 6-8. The noise measurement locations are depicted in Exhibit 6-3.

**TABLE 6-8  
EXISTING NOISE MEASUREMENTS**

Site	Location	L <sub>max</sub>	L <sub>10</sub>	L <sub>33</sub>	L <sub>50</sub>	L <sub>90</sub>
1	County Line Rd. and Third St.	80	74	70	69	66
2	2nd St. between Ave. L West and Calimesa Blvd.	66	58	52	51	50
3	County Line Rd. and Calimesa Blvd.	76	76	74	72	69
4	Calimesa Blvd. north of Ave. L West	76	75	72	68	62
5	Calimesa Blvd. and Singleton	66	66	60	59	58
6	Woodhouse Rd.	64	52	51	51	50

**TABLE 6-8  
EXISTING NOISE MEASUREMENTS**

Site	Location	L <sub>max</sub>	L <sub>10</sub>	L <sub>33</sub>	L <sub>50</sub>	L <sub>90</sub>
7	San Timoteo Canyon Rd. north of RR crossing	66	66	58	54	50
<p>L<sub>max</sub> - the maximum sound level recorded during the noise measurement period.  L<sub>10</sub> - the sound level exceeded 10 percent of the noise measurement period.  L<sub>33</sub> - the sound level exceeded 33 percent of the noise measurement period.  L<sub>50</sub> - the sound level exceeded 50 percent of the noise measurement period.  L<sub>90</sub> - the sound level exceeded 90 percent of the noise measurement period; also considered as the background noise level.</p>						
Source: David Evans and Associates, 1993.						

Site 1 is located within a mixed use area along County Line Road east of Interstate 10. Vehicular traffic, truck unloading operations, and car wash machinery created the background noise levels at the site. Noise levels ranged from 80 dB to 56 dB, and the predominant levels were between 66 dB and 68 dB.

Site 2 is located at the First American Baptist Church within a residential area on Second Street between Avenue L West and County Line Road. Noises at Site 2 consisted of occasional automobile traffic, planes, birds, and residential noises. The noises metered ranged from 50 dB to 66 dB.

Sites 3 and 4 were located along Calimesa Boulevard at the center of the City's commercial and industrial corridor. Noise sources included light winds, steady vehicular traffic, commercial operations, and industrial machinery. These sites had the highest noise levels in the City. Metered noises ranged from 60 dB to 76 dB.

Site 5 is located at the Calimesa Boulevard/Singleton Road intersection. Background noise was created by light winds and vehicular traffic along Interstate 10, Calimesa Boulevard and Singleton Road. Metered noises ranged from 54 dB to 66 dB.

Site 6 is located along Woodhouse Road, within San Timoteo Canyon. The site was relatively quiet with background noise consisted of distant vehicular traffic noise along Interstate 10, and a few passing vehicles. The noises metered ranged from 50 dB to 65 dB.

Site 7 is located along the San Timoteo Canyon Road, between the two Southern California Edison easement branches. Background noise was created by light winds and occasional vehicular traffic, and noise metered ranged between 50 dB and 66 dB.

### Traffic Noise Levels

Noise along transportation corridors are highest near the roadway and decrease as the distance from the roadway (noise source) increases. Thus, they may be shown as contours representing equal noise exposures along the roadway. The contours provide a visualization of estimates of sound level. Land forms and man-made structures have very complex effects on sound transmission and on noise contours. Generally, solid barriers between a source and receiver, such as hills, berms and walls absorb and/or reflect noise resulting in a quieter environment. Where barriers or land forms do not interrupt the sound transmission path from source to receiver, the contours prove to be good estimates of average noise level. In areas where barriers or land forms interrupt the sound transmission, the noise contours overestimate the extent to which a source intrudes into the community.

The City of Calimesa roadway noise contour data were generated with the Federal Highway Administration's Highway Traffic Noise Prediction Model, U.S. Department of Transportation (1978). Model input data included existing average daily traffic levels; day/evening/night percentages of autos, medium, and heavy trucks; vehicle speeds; ground attenuation factors; and roadway widths. The distance from the roadway centerline to the roadway 60, 65 and 70 dB CNEL contours for the existing conditions (1992) are provided in Table 6-9.

TABLE 6-9 CALCULATED EXISTING ROADWAY NOISE LEVELS				
Roadway Segment	Distance From Roadway Centerline to CNEL (in feet)*			CNEL 50 ft. from Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Interstate 10	255 <sup>b</sup>	801	2531	75
Calimesa Boulevard, north of Sandalwood Drive	0	0	121	62
Calimesa Boulevard, south of Sandalwood Drive	0	0	0	57
Cherry Valley Boulevard	0	0	0	59
Brookside Avenue	0	0	0	54
Singleton Road east of Calimesa Boulevard	0	0	0	56
San Timoteo Canyon Road	0	0	0	52
Avenue L West	0	0	0	59
5th Street	0	0	0	57



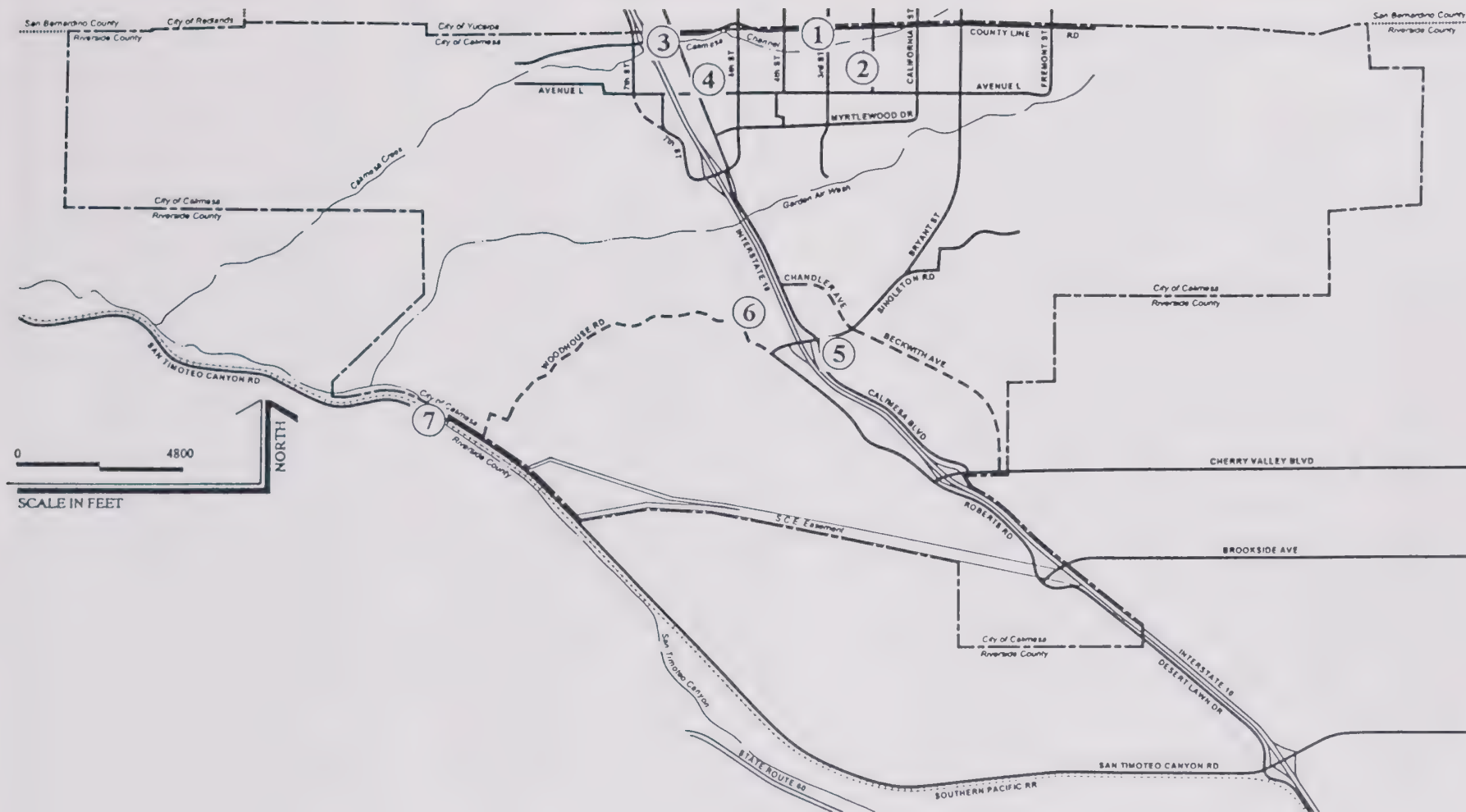




TABLE 6-9 CALCULATED EXISTING ROADWAY NOISE LEVELS				
Roadway Segment	Distance From Roadway Centerline to CNEL (in feet) <sup>a</sup>			CNEL 50 ft. from Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Bryant Street	0	0	0	53
<sup>a</sup> Does not consider any obstructions to the noise path. <sup>b</sup> Traffic noise levels for receptors within 50 feet of the roadway centerline would require a site-specific analysis to determine the CNEL values. Source: Meyer, Mohaddes Associates, Inc., David Evans and Associates, 1993.				

As indicated in Table 6-9, Interstate 10 and Calimesa Boulevard are the major generators of noise within Calimesa generating 75 and 62 CNEL at 50 feet from the roadway's centerline. All other streets generate less than 60 CNEL at 50 feet from the roadway's centerline. Noise contours along the freeway are shown in Exhibit 6-4.

### Train Noise

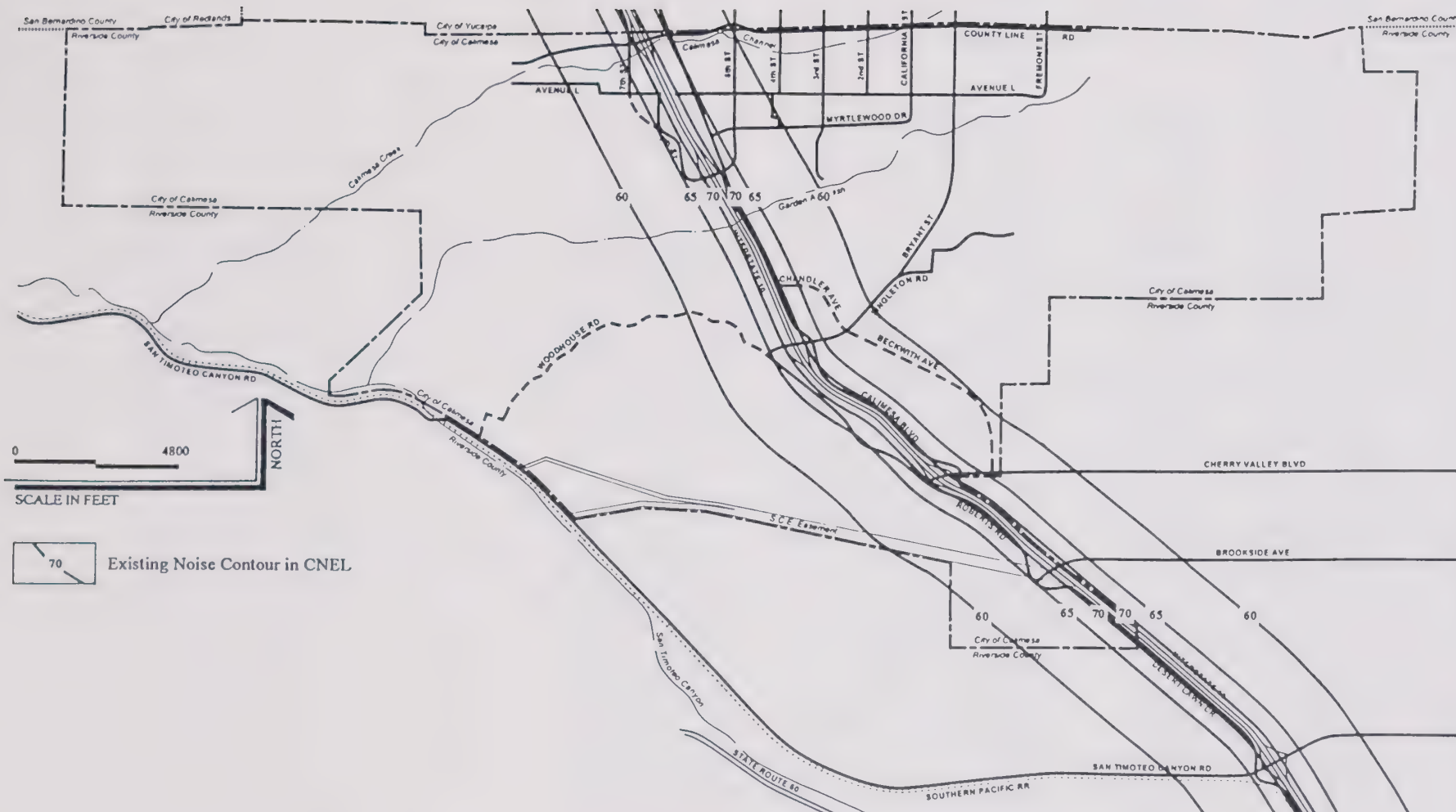
The Southern Pacific Railway Company currently maintains a double track (the Santa Ana Branch) adjacent to San Timoteo Road, with their tracks running northwest to southeast along the City's southwest boundary. Train operations occur at all hours and change in response to customer needs. Currently, an average of 27 diesel trains run along the Santa Ana Branch at an approximate speed of 29 miles per hour during the daytime and nighttime periods. Each diesel train contains an average of 47 rail cars. Trains create individual noise impacts lasting several minutes during each pass. Noise from passing trains is dependent on the number of trains, speed, type of tracks, grade crossings, track curves, crossing bells and train horns, and the type of trains. The train tracks along this portion of the railway are welded, rather than bolted, which creates less noise. The train tracks are adjacent to the undeveloped Oak Valley area and thus train noise does not disturb City residents.

### Airport Noise

The City of Calimesa is not located within the noise impact areas of nearby airports, although there are several commercial airports serving the Calimesa area: the Perris Valley Airport, the Banning Airport, Riverside Municipal Airport, and the Hemet-Ryan Airport in Riverside County; and the Redlands Municipal Airport, and Ontario International Airport in San Bernardino County. In addition, March Air Force Base in Riverside County maintains federal defense training and aeronautical operations. Overflights from these airports are sources of transportation related noise in the City of Calimesa. Noise associated with aircraft operations from these airports create noise impacts in Calimesa throughout various times of the day. Helicopters that fly over the City also generate noise levels ranging from 85 to 95 dBA.







70 Existing Noise Contour in CNEL





## SECTION 7: AIR QUALITY

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### INTRODUCTION

This Air Quality Profile Report provides information on local air quality, emission sources, and legal requirements for air quality planning. Also, it summarizes existing City programs that meet AQMP requirements. This background information will provide the basis for identifying additional programs and policies to be incorporated into an Air Quality Element.

Air quality issues are basically rooted with the health problems that arise from exposure to air pollution. As a public health issue, the preservation of good air quality has gained importance in all levels of planning. Air quality is based on levels of contaminants, such as ozone, carbon monoxide, nitrogen dioxide and particulate matter, in the air.

Ozone (O<sub>3</sub>) is a nearly colorless gas which irritates the lungs and damages materials and vegetation. It is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight). Carbon monoxide (CO) is a colorless, odorless toxic gas which interferes with the transfer of oxygen to the brain. It is produced by the incomplete combustion of carbon-containing fuels (vehicular exhaust). Nitrogen dioxide (NO<sub>2</sub>) is a yellowish-brown gas which, at high levels, can cause breathing difficulties. It is formed when nitric oxide (pollutant from burning processes) combines with oxygen. PM<sub>10</sub> are particulate matter less than 10 microns in diameter. It causes a greater health risk than larger sized particles, since these fine particles can more easily penetrate the defenses of the human respiratory system and cause irritation by themselves and in combination with gases.

These pollutants come from vehicle exhaust, power generation, natural gas generation and the operation of certain equipment in construction and industry. Exhaust emissions from vehicles vary according to speed, type of engine (gasoline or diesel), the length of use, and the power available. Emissions from stationary sources occur at off-site power plants and are estimated by the amount of natural gas and electric power consumptions. Construction and industrial equipment generate pollutant emissions that are highly variable according to the type and technology of a specific equipment.

### AIR QUALITY REGULATIONS

#### Federal Clean Air Act

The federal Clean Air Act establishes ambient air quality standards and requires all areas of the nation to meet these standards. The 1977 amendments to the Act state that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards by December 31, 1987. The South Coast Air Basin could not meet the deadline for ozone, nitrogen dioxide, carbon monoxide, or PM<sub>10</sub>. The State Implementation Plan for the Basin, as adopted in 1979 and 1982, were unable to demonstrate attainment by the required date, and the U.S. Environmental Protection Agency was forced by federal court action to disapprove the plan.

The 1990 Amendments to the Act outline new ways of attaining the federal air quality standards. These amendments call for mandatory annual reductions, progressively more stringent requirements, new tailpipe emissions standards, and transportation alternatives. Regulations for toxic air pollutants have also been included. The amendments to the Clean Air Act extended the ozone attainment deadline to 2010 for any area that was determined to have extreme ozone pollution. The South Coast Air Basin is the only area in the nation considered as an extreme non-attainment area. The Basin is required to reduce ozone precursor emissions by 3% annually from a 1990 base; attainment of the federal carbon monoxide standards by no later than 2000; attainment of the federal PM<sub>10</sub> standards by no later than 2005; and mandates transportation management controls in the Los Angeles and San Diego areas, while making them optional elsewhere in the nation.

### **California Clean Air Act**

In 1988, the California Legislature enacted the California Clean Air Act (CCAA), which requires air pollution control districts to achieve and maintain the state air quality standards. These standards are generally stricter than the federal standards. The CCAA amended the enabling authority for air pollution control districts in California by giving these districts, including the South Coast Air Quality Management District (SCAQMD), broad new authority through the CCAA to regulate motor vehicle use with indirect source controls in areas that have not met national or state ambient air quality standards.

The CCAA requires that regional emissions be reduced by 5 percent per year from a 1987 base, averaged over 3 year periods, until attainment can be demonstrated. No specific attainment date is designated. Each area that does not currently meet a national or state ambient air quality standard was required to prepare a plan which demonstrated how the 5 percent reductions would be achieved. The plan was to be locally adopted and submitted to the California Air Resources Board (ARB) by June 30, 1991. Areas with the most heavily degraded air quality are required to reduce emissions 50 percent from 1987 levels by December 31, 2000. Plans must be updated in 1998, if attainment cannot be demonstrated by the year 2000.

Provisions of the 1990 Clean Air Amendments that relate to violations of ozone and carbon monoxide standards emphasize strategies for reducing vehicle miles travelled, and require the submission of a plan revision "that identifies and adopts specific enforceable transportation control strategies and transportation control measures to offset any growth in emissions from growth in vehicle miles travelled or numbers of vehicle trips in such area". This will meet the statutory requirements for demonstrating periodic emissions reductions.

### **AIR QUALITY STANDARDS**

Air quality is based on the level of contaminants in the air, as compared to national and state standards. Standards set by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) are at levels that protect public health and welfare, with an adequate margin of safety. There are national and state standards for ozone, carbon monoxide, nitrogen dioxide, PM<sub>10</sub>



(suspended particulate matter 10 microns or less in diameter), sulfur dioxide, and lead. Aside from these, California has standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. The federal and state standards are provided in Table 7-1.

**TABLE 7-1  
AMBIENT AIR QUALITY STANDARDS**

California		National	
Air Pollutant	Concentration	Primary	Secondary
Ozone	>0.09 ppm, 1-hr avg. <sup>a</sup>	>0.12 ppm, 1-hr avg.	0.12 ppm, 1-hr avg.
Carbon Monoxide	>9.0 ppm, 8-hr. avg. >20 ppm, 1-hr. avg.	>9.0 ppm, 8-hr. avg. >35 ppm, 1-hr avg.	>9.0 ppm, 8-hr. avg. <sup>b</sup> >35 ppm, 1-hr. avg.
Nitrogen Dioxide	>0.25 ppm, 1-hr avg.	0.053 ppm, annual avg.	0.053 ppm, annual avg. <sup>c</sup>
Sulfur Dioxide	≥0.05 ppm, 24-hr avg. with ≥0.10 ppm, 1-hr avg. ozone or with 24-hr TSP ≥100 ug/m <sup>3</sup> >2.5 ppm 1-hr avg.	0.03 ppm, annual avg >0.14 ppm, 24-hr avg.	>0.50 ppm, 3-hr. avg.
Suspended Particulate Matter (PM <sub>10</sub> )	>30 ug/m <sup>3</sup> annual geometric mean >50 ug/m <sup>3</sup> , 24-hr. avg.	>150 ug/m <sup>3</sup> , 24-hr avg.; >50 ug/m <sup>3</sup> annual arithmetic mean	>150 ug/m <sup>3</sup> , 24-hr avg.; >50 ug/m <sup>3</sup> annual arithmetic mean
Sulfates	≥25 ug/m <sup>3</sup> , 24-hr avg. <sup>d</sup>		
Lead	≥1.5 ug/m <sup>3</sup> , 30-hr. avg.	≥1.5 ug/m <sup>3</sup> , calendar quarter	>1.5 ug/m <sup>3</sup>
Hydrogen Sulfide	≥0.03 ppm, 1-hr avg.		
Vinyl Chloride	≥0.010 ppm, 24-hr. avg.		
Visibility-Reducing Particles	In sufficient amount to reduce prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation.		

<sup>a</sup>) Effective 3/9/87. The standard was previously ≥0.10 ppm, 1-hr. avg.

<sup>b</sup>) Effective 9/13/85. The standard changed from ≥9.3 ppm to ≥9.5 ppm.

<sup>c</sup>) Effective 7/1/85, standard changed from >.0532 ppm to >.0534 ppm.

<sup>d</sup>) Effective 3/9/87, standard changed from ≥25 ppm to >25 ppm.

<sup>e</sup>) Effective 7/1/87. The standards were previously:

Primary: Annual geometric mean TSP >75 ug/m<sup>3</sup> and 24-hr avg. TSP >260 ug/m<sup>3</sup>

Secondary: Annual geometric mean TSP >60 ug/m<sup>3</sup> and 24-hr avg. TSP >150 ug/m<sup>3</sup>

ppm = parts per million by volume  
> = greater than

ug/m<sup>3</sup> = micrograms per cubic meter  
≥ = greater than or equal to

Source: South Coast Air Quality Management District, 1991.



## CLIMATE AND METEOROLOGY

The City of Calimesa is located in the easternmost portion of the South Coast Air Basin of California. The Basin covers approximately 6,600 square miles, encompassing Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. It is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east.

The Basin has a mediterranean climate, characterized by warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidities. Variations in rainfall, temperatures, and localized winds occur throughout the Basin due to the presence of various mountains and hills inland and the Pacific Ocean on the west. Rain also varies seasonally. Summers are often dry and four to five months could extend with no rain. In the winter, occasional storms often bring rain. Rainfall is lowest in the coastal plain and inland valleys, higher in the foothills, and highest in the mountain areas. Winters are cold but frost is rare, as temperatures seldom fall below 28°F. The annual average daytime temperatures range from 91° F in August to 62°F in January, with temperatures frequently reaching 100°F during the summer months. Annual rainfall in Calimesa is 10.94 inches and occurs almost exclusively from late October to early April. The average relative humidity is 59 percent.

Winds patterns in Calimesa generally follow predominant winds in the Basin. During the day, the predominant wind is from the west through southwest directions, demonstrating the effects of the regional onshore flow pattern. At night, the direction of the local offshore flow is generally from the northeast and east directions in Calimesa. Average wind speed is 2 to 3 miles per hour.

The predominant winds in the Calimesa area are broken by occasional winter storms and episodes of Santa Ana winds. Santa Ana winds are strong northerly or northeasterly winds that originate from the desert and go through the Newhall and Cajon Passes and into the Basin. They occur most often from September through March. Usually warm, always very dry, and often full of dust, these winds are particularly strong in passes and at the mouths of canyons. On the average, Santa Ana winds occur five to ten times a year, each lasting up to a few days.

### Meteorological Influences on Air Quality

Wind flow patterns affect air quality by directing pollutants downwind of their sources. Local meteorological conditions (such as light winds and shallow vertical mixing) and topographical features (such as surrounding mountain ranges) create areas of high pollutant concentrations by hindering dispersal. Temperature inversions are created by a semi-permanent subtropical high pressure cell over the Pacific Ocean, by trapping cool air near the ground with warm air from the ocean. This hampers dispersion by trapping air pollutants in a limited atmospheric volume near the ground.

During summer, sunshine provides the energy for photochemical reactions between nitrogen oxides and reactive organic compounds which form ozone. Because of the long time period required to form ozone in the atmosphere, ozone concentrations are largely determined by transport patterns. With southwesterly winds occurring on most days in Calimesa, the ozone transport route into the City is from sources to the west and southwest, and as far as the urban areas of Los Angeles. In turn, ozone pollutants emitted in Calimesa are most likely to contribute to ozone levels in areas east of the City. Ozone concentrations in Calimesa generally peak during the afternoon, after noon sunlight has occurred and after the transport of reactive organic compounds from the Los Angeles area. They are greater in summer and early fall, when abundant sunshine exists.

Ozone and other contaminants from urban areas to the west move eastward in the Basin, through mountain passes and up the mountain slopes. Emissions east of the Basin move east and pass through the Beaumont Pass and into the Low Desert area.

In the winter, temperature inversions occur close to ground level during the night and early morning hours. Thus, the greatest pollution problems are from carbon monoxide and nitrogen oxides. Carbon monoxide transport is limited. Since it is produced primarily from automobile exhaust, the highest concentrations are associated with areas of heavy traffic.

### **Regional Air Quality**

Air quality in the Southern California region is highly polluted, even with federal, state and local pollution controls. Ambient air quality standards set by ARB and EPA to protect public health are frequently violated. Ozone levels are being exceeded in the region more frequently than anywhere else in the nation. Regulations on air pollution control focusing on the reduction of industrial emissions have been expanded to include automobile emissions. Recently, the regulations have included the use of alternatives to transportation, land planning, and energy sources, rather than on expanding technological controls. These actions are leading to greater participation by local governments in controlling air pollution.

The South Coast Air Quality Management District (SCAQMD) is a regional agency charged with the regulation of pollutant emissions and the maintenance of local air quality standards. The SCAQMD samples ambient air at over 32 monitoring stations in and around the Basin. Locations of these stations are shown on Exhibit 7-1. In 1992, the Basin did not attain national and state standards for ozone, carbon monoxide, nitrogen dioxide, and PM<sub>10</sub>. The Basin also exceeded state standards for visibility.

Levels of ozone exceed both national and state standards throughout the Basin. The Basin exceeds this standard more frequently than any other area in the United States, and also records the highest peak readings. National and state standards for carbon monoxide are exceeded in more densely populated Los Angeles and Orange counties, but not in Riverside and San Bernardino counties. The national nitrogen dioxide standard is exceeded only in Los Angeles County. The state nitrogen



dioxide standard is exceeded in both Los Angeles and Orange counties, but not in Riverside and San Bernardino counties.

PM<sub>10</sub> levels regularly exceed the national and state standards in Los Angeles, Riverside, and San Bernardino counties, and state standards in Orange County. In 1989, the highest annual average PM<sub>10</sub> readings in the United States were recorded at Rubidoux in Riverside County. Sulfur dioxide and lead levels in all areas of the Basin are below national and state standard limits.

### Local Air Quality

Ambient air quality in the City of Calimesa is characterized by readings taken at the closest SCAQMD pollutant monitoring stations in the cities of Hemet and Banning (see Exhibit 7-1). Table 7-2 lists the air quality readings at these stations from 1987 through 1991. The stations do not monitor carbon monoxide, nitrogen dioxide, and sulfur dioxide because these pollutants are generally associated with heavily urbanized areas. Calimesa and the surrounding communities are generally undeveloped or developed at very low densities that these pollutants are not generated in large quantities.

TABLE 7-2 AIR MONITORING STATION READINGS					
Pollutant	1987	1988	1989	1990	1991
<b>Ozone (O<sub>3</sub>) at Hemet Station</b>					
Maximum concentration (ppm)	0.18	0.18	0.19	0.22	0.19
Number of days state standard exceeded	136	89	77	75	66
Number of days federal standard exceeded	82	28	21	43	23
<b>Suspended Particulates (PM<sub>10</sub>) at Banning Station</b>					
Maximum (24-hour concentration (ug/m <sup>3</sup> ))	163	113	194	89	87
Percent samples exceeding state standard	36.1	29.8	33.3	20.4	29.8
Percent samples exceeding federal standard	1.6	0	3.3	0	0
ppm = parts per million ug/m <sup>3</sup> = micrograms per cubic meter					
Source: South Coast Air Quality Management District Air Quality Data - 1987 through 1991.					

Under predominant wind conditions, emissions generated in the City of Calimesa are dispersed to the east and northeast during the day, and slowly drift southwest or south at night. Local emissions contribute to regional ozone concentrations downwind, but can, under stagnant meteorological conditions, add to localized levels of ozone and other pollutants. At the same time, local ozone concentrations are due to nitrogen dioxide and reactive organic compounds from areas west and southwest of the City.



- EXHIBIT 7-1  
SCAQMD AIR QUALITY MONITORING STATIONS



Suspended particulates are often due to upwind sources such as undeveloped and unpaved areas and ground disturbance (such as construction and grading activities). Strong winds, lead to hazards associated with suspended particulates. Other pollutants are generally not a problem in the Calimesa area, due to the relatively low density and intensity of development.

## **SCAQMD REGULATIONS**

### **1989 Air Quality Management Plan (AQMP)**

On March 17, 1989 the SCAQMD and SCAG adopted a comprehensive AQMP for the South Coast Air Basin. The 1989 AQMP relied, in part, on technology which has not yet been invented to meet its 2007 target. It called for stricter controls on automobiles, paints and coatings, new industries, and transportation usage.

The 1989 AQMP called for local governments to specify the measures they will use to improve air quality. These measures are to include actions to reduce contributions to air pollution from vehicle trips, energy usage, local vehicle congestion, and local sources of particulates, including grading and construction. A major objective of the 1989 AQMP was achieving a greater balance between housing and employment opportunities throughout the region. The basis for this policy is that workers can be expected to reduce vehicle miles traveled if they live where there is greater opportunity for employment in the vicinity.

As a result, the existing job/housing ratio in subregions which had previously been established for planning purposes were identified and subregions which had either a disproportionate number of housing units or jobs were assigned job/housing goals intended to bring the subregion into greater balance by the year 2010. Local governments were expected to monitor new development and take measures to encourage greater housing density in areas projected to be rich in jobs or either decrease projected housing units or increase projected job opportunities in areas which were projected to have an excess of housing.

Although the 1989 AQMP was adopted after passage of the CCAA, it was prepared to comply with federal requirements in anticipation of an extension of the attainment deadline. Additional revisions were scheduled for 1991 to comply with new requirements in the CCAA. Following enactment of the 1990 CCAA Amendments, it was determined that an additional revision is required in 1993 to meet procedural requirements.

### **1991 Air Quality Management Plan**

The 1991 AQMP continues to emphasize local government measures, but shifts the emphasis from jobs/housing balance to equivalent reductions in vehicle miles traveled and the adoption of ordinances in lieu or in conjunction with adoption of air quality ordinances, plans or elements in



general plans. The 1991 AQMP defers the date for adoption of air quality elements to December 31, 1992.

The 1991 AQMP requires local governments to adopt ordinances for the following strategies:

- Person Work Trip Reduction
- Non-motorized Transportation
- Employer Rideshare and Transit Incentives
- Auto Use Restrictions
- Parking Management
- Merchant Transportation Incentives
- Auto Use Restrictions
- Truck Dispatching, Rescheduling and Rerouting

In addition to the programs listed above, the 1991 AQMP set forth the following local government measures as constituting its indirect source program, as required by the California Clean Air Act. The AQMP gives local governments the option of also adopting these measures and implementing them at the local level, or letting the SCAQMD adopt and implement them.

- Environmental Review Program
- Trip Reduction for Schools
- Supplemental Development Standards
- Special Activity Centers
- Enhanced Regulation XV
- Truck Programs
- Registration Program
- Sensitive Receptor Review for Risks from Toxic Air Contaminants

According to the AQMP, attainment of federal standards will occur no later than 2000 for carbon monoxide and nitrogen dioxide, 2005 for PM<sub>10</sub> and 2010 for ozone. State standards would be attained by 2000 for nitrogen dioxide and 2010 for carbon monoxide. State standards for ozone and PM<sub>10</sub> would be achieved after 2010, but is not expected even with full implementation of the 1991 AQMP. Future AQMP revision will need to identify additional control measures to attain these standards.

Once the AQMP is approved by ARB, it shall be submitted to the U. S. Environmental Protection Agency (EPA) for incorporation into the State Implementation Plan. Upon approval from EPA, the AQMP will serve as the framework for future federal air pollution control programs in the South Coast Air Basin.

## Stationary Source Controls

In addition to the local government measures, both the 1989 and 1991 AQMP's contain a number of measures which tighten existing, or add new, controls on industrial, commercial and residential activities. The 1989 AQMP was divided into three tiers: Tier I contained measures that were considered to be feasible and ready for immediate implementation; Tier II were measures where technology had been developed but additional testing or commercial development was needed to enact the controls; and Tier III measures were those where new technology would have to be developed in order to achieve the projected emission reductions.

Many of the measures in Tier I have already been enacted. One of the most significant measures is a revised Regulation XIII, the District's New Source Review Rule, which now requires offsets from all emission increases.

Any new, or modified existing, source of emissions that emits more than 1 pound a day of a regulated air pollutant is subject to the requirements of Regulation XIII, which requires that all increases in emissions be offset by achieving at least an equal amount of reductions from existing sources. Small sources, i.e. sources emitting less than 2 tons/year of any regulated contaminant, are eligible to receive these offsets from the Community Bank, which is funded through shutdowns of facilities throughout the Basin. In addition, new or modified equipment is required to install Best Available Control Technology (BACT), as specified by the SCAQMD. Most, if not all, industrial facilities in Calimesa will be eligible to receive offsets from the Community Bank because they are relatively small in size. However, some existing equipment may be old, and is therefore emitting higher pollution than would be possible if equipment were replaced with equipment using BACT. Cleanup of these facilities is an option for sources elsewhere in the Basin which are not eligible to use the Community Bank.

The SCAQMD received authorization through the California Clean Air Act to adopt rules regulating indirect sources of pollutants. Indirect sources are facilities which do not have equipment which emits pollutants, but which attract large numbers of automobiles which represent, in aggregate, a significant source of pollution. The City of Calimesa currently has no source which would qualify as a major indirect source.

The 1991 AQMP placed a high priority on market incentives. In response, the SCAQMD developed a new program called Regional Clean Air Incentives Market or RECLAIM that will allow large facilities to meet their 5% annual emission reduction targets. Companies subject to the new regulations will be able to achieve required emission reductions of reactive organic gasses, nitrogen oxides, and, potentially, sulfur oxides through their choice of add-on controls, use of reformulated products, and/or purchasing excess emission reductions from other sources. Equipment permits will be replaced with facility permits. Emission rates are to be replaced with mass emission limits. Retrofit control rules will be replaced with annual emission reductions.

The District is recommending that source categories with annual emissions equal to or greater than four tons of these pollutants be included in the program. They estimate that the program will apply to approximately 2,000 sources of ROG, 700 sources of NO<sub>x</sub> emissions, and possibly 100 sources of SO<sub>x</sub> emissions. Certain essential public services, restaurants, dry cleaners, and gasoline dispensing facilities will be regulated through command and control rules. Additional small source exemptions may also be considered where it appears more cost effective to regulate through source specific rules. Sources that emit less than 4 tons a year may be included in the program at a later date.

Many local industries are covered by SCAQMD regulations, including those which are engaged in metal plating; manufacturing of fiberglass and plastic products; labeling and storage of organic solvents; decreasing equipment; and use of materials which emit hazardous air pollutants. Commercial restaurants are subject to SCAQMD regulations covering charbroilers.

### **AQMP Conformity Procedures**

The EPA requires that local and regional components of plans to meet federal standards (SIP's) include conformity procedures for evaluating federally funded projects. Conformity demonstration procedures for the 1989 AQMP extended these requirements to non-federally funded capacity-enhancing waste water treatment projects and to regionally significant transportation and general development projects. Guidelines for demonstrating this conformity were developed by SCAG and approved by the SCAQMD and ARB. Criteria for determining whether a project is required to demonstrate conformity are shown in Table 7-3.



**TABLE 7-3**  
**AQMP GENERAL DEVELOPMENT CONFORMITY CRITERIA**

1. Airports with at least 50 based aircraft, 25,000 annual itinerant operations, or 35,000 local operations.
2. Airports served by a CAB or PUC certified carrier.
3. Public use airports more than 20 miles away from the nearest airport meeting the above criteria.
4. Sports, entertainment or recreation facilities that accommodate at least 4,000 people per performance, or that contain 1,500 fixed seats or more.
5. Office building or office parks that employ more than 1,000 people or containing over 250,000 square feet.
6. Hotels or motels with 500 rooms or more.
7. New electrical generating facilities or expansion of existing generating facilities.
8. Transmission lines with capacity of 22 kw or more.
9. Flood control project, dams, reservoirs or debris basins on or affecting a major water body that has a tributary area greater than 20,000 acres at the county line, or facilities on a drainage course having a tributary basin greater than 50,000 acres and draining directly into the ocean.
10. Projects in an area that is designated to be of regional significance and concern in the SCAG adopted Conservation and Open Space Plan.
11. Industrial plants and industrial parks that employ more than 1,000 people, occupy more than 40 acres of land or contain more than 650,000 square feet of floor space.
12. Mining operations with more than 40 acres or producing 600,000 short tons annually.
13. Petroleum or gas refineries, recovery operations, storage facilities or expansion of existing facilities (not gas station storage facilities).
14. Designation of a drilling district.
15. Petroleum and gas pipelines that are part of national distribution system.
16. Water ports, or the expansion of an existing port, so that capacity is increased by at least one million short tons of cargo per year.
17. Small craft harbors with 300 or more boat slips or open water moorages, or expansions of an existing harbor to accommodate at least 300 additional boat slips or open water moorages
18. Residential development including mobile home parks with 500 dwellings or more.
19. State highways and arterial roads(construction or major modification) or roads that provide primary access to a regionally significant area (designated in the SCAG adopted Conservation and Open Space Plan).
20. Construction of a post-secondary school, public or private, for 3,000 students or more, or expansion of an existing facility having a capacity of 3,000 students or more by an addition of at least 20 percent more students.
21. Sewage treatment facilities with a capacity of at least 750,000 gallons per day, or the expansion of an existing facility by at least that much, and any proposed interceptor.
22. Shopping centers or trade centers that employ 1,000 persons or more, or contain 500,000 square feet of floor space.
23. Class I solid waste disposal sites or the expansion of an existing Class I site, or other sites of more than 40 acres, or expansions of sites by at least 40 acres.

**TABLE 7-3**  
**AQMP GENERAL DEVELOPMENT CONFORMITY CRITERIA**

- |     |  |
|-----|--|
| 24. | Transit projects.  |
| 25. | Water treatment facilities with a capacity of 225,000 gallons a day or more, or the expansion of an existing facility by that much, and proposed major arterial water mains. |
| 26. | Construction of a hospital of 500 beds or more, or expansion of a hospital of this size by 20% or more.  |

Source: SCAQMD, 1991.

General development projects subject to conformity review must demonstrate that they conform to the subregional job/housing balance goals established in the SCAG's Growth Management Plan and incorporated in the AQMP. If not, such projects must implement trip reduction measures, user fees, or other appropriate mitigation measures which will achieve reductions in vehicle miles traveled (vmt) equivalent to the amount that SCAG estimates would be achieved through meeting the job/housing balance target. The 1991 AQMP calls for transportation demand measures equivalent to the job/housing performance goal. These measures must be in addition to all those otherwise required in the AQMP. Job/housing balance is still one option for achieving these reductions.

Initially, SCAG performs the conformity review for all applicable projects. Once a city or county has adopted an air quality element consistent with the AQMP, the local jurisdiction takes over the conformity monitoring and SCAG review is no longer required. Each city or county is responsible for monitoring the cumulative impact of small projects within its jurisdiction to determine whether progress is being made towards achieving job/housing balance. Semiannual reports on local actions to implement the plan, as well as progress towards achieving job/housing balance or equivalent reductions in vmt, are required by SCAG and SCAQMD in order to compile reports required by the California ARB, as part of its 1989 AQMP approval action.

Conformity Procedures for the 1991 AQMP were issued by SCAG in May, 1991. Conformity procedures for general development projects are similar to those for the 1989 AQMP. Two areas of difference are (1) that mitigation measures which achieve reductions in vehicle miles traveled equivalent to that which would be achieved through jobs/housing balance can be substituted for a jobs/housing balance demonstration, and (2) the analysis must show the alternative with the least air quality impact rather than showing that the project will result in no significant long term adverse impacts on air quality.

## **AIR QUALITY PLANNING**

As described earlier, Air Quality Elements or their equivalent must be incorporated in local general plans in order to conform to requirements of the adopted 1989 AQMP and the 1991 AQMP. Guidelines for the Development of local Air Quality Elements have been prepared by the Southern California Association of Governments. These guidelines contain a number of actions which are



recommended or required for local governments in order to conform to the 1989 AQMP. Southern California cities differ significantly in size and character. Therefore, some recommended actions are not applicable to all cities and programs need to be tailored to meet the unique conditions of each city.

Identification of existing programs and conditions in the City that impact on air quality will help identify opportunities and constraints for new or modified programs. The following discussion expands on City programs that are helping to improve local air quality.

- **Land Use.** The City of Calimesa is largely residential, developed primarily with single family dwellings. Although primarily residential, the City also provides local commercial and service establishments. There are a number manufacturing and commercial uses which provide local employment in the City. Still, a large number of residents are employed outside the City and patronize commercial stores in adjacent communities.
- **Local Emissions.** Calimesa is a small city and its contribution to Basin emission totals is also small. Local sources of air pollution consist mainly of vehicle trips to and from the City. As a residential community, most of the trips in the City are home based trips. Traffic on the Interstate 10 freeway also generates pollution in the City. Trains along the SPRR railroad on the southwest contribute to local emissions. Stationary sources include equipment and appliances in residential areas and the limited commercial and industrial uses along Calimesa Boulevard.
- **New Construction.** The City has no special controls on fugitive dust other than complying with the SCAQMD's nuisance regulations. Developers must submit a grading plan before receiving a grading permit; the plan must include dust control on site, such as periodic watering, soil binders, etc. Trucks are not required to cover their loads on city streets.
- **Street Trees.** The City requires landscaping in new developments.
- **Energy Conservation.** The City uses Title 24, but has no additional ordinances. The City has no fuel-saving or alternate fuel vehicles.
- **Public Transit and Parking.** There is no public transit service in the City. Parking along City streets is generally permissible.
- **Waste/Recycling.** The City has a residential recycling program through the Cherry Valley Sanitation Company. City Hall also practices inhouse recycling and source reductions programs. The City organizes hazardous waste disposal from residences and provides a dropoff center for recyclables at City Hall. Approximately 40 tons of recyclable materials are generated by these programs per month.



- **Regulation XV.** Regulation XV requires that employers of more than 100 persons reporting to work between 6 and 10 a.m. prepare and implement plans specifying how they will increase average vehicle ridership of automobiles arriving at the facility, averaged over a five day week. There are no businesses in the City that have 100 employees or more, thus, Regulation XV is not applicable. Also, there are no Transportation Management Associations in the City.
- **Agricultural Uses.** Agricultural and livestock operations in the City contribute to suspended particulates due to cultivation and unpaved open land. Odors from livestock also raise air pollution concerns. There are no toxic air contaminate generators in the City.
- **Regional Planning:** The City of Calimesa is part of the Western Riverside Council of Governments (WRCOG). The WRCOG is involved in subregional planning efforts, including the preparation of the subregion's contribution to SCAG's Regional Comprehensive Plan, an air quality element, TCM and TDM measures, and other programs relating to growth management, air quality, and transportation planning for the subregion. Participating cities, including the City of Calimesa, have incorporated efforts and programs of the WRCOG into specific city policies and programs. The Air Quality Element of the Calimesa General Plan reflects the City's support of the WRCOG's Air Quality Implementation Program. This program will allow the subregion to meet clean air goals, as required under the AQMP.

### **Job/Housing Balance**

The City is located in the Central Riverside subregion. For the subregion as a whole, the ratio of jobs to housing units was estimated to be 0.45 in 1984. This means that there are only 0.45 jobs per housing unit in the area making it "housing rich". Jobs and housing are considered to be "balanced" at a ratio of 1.2. The subregion is projected to increase jobs more than housing units by 2010, based on current trends. Therefore, a goal of 0.70 jobs per housing unit was set for 2010.

Calimesa's residential nature means that it is contributing workers to jobs in neighboring cities within the subregion. It is likely employment opportunities in the City will increase as commercial uses are developed to meet the increasing demand for goods and services from local residents. This will help achieve better jobs/housing balance in the area.

To be consistent with SCAG's 1989 AQMP growth management goals, Calimesa would either need to add additional jobs through redevelopment of its industrial and commercial areas or reach agreements with surrounding cities showing that its housing surplus is being accounted for in subregional job/housing planning.

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<u>Aerial Photographs</u>				
<u>Date</u>	<u>Flight No.</u>	<u>Frame No.</u>	<u>Agency</u>	<u>Scale</u>
2/15/60	Calimesa	60-63, 65-67	-----	1:12,000
1/29/62	FCFC 62	3-354	RCFCD	1:24,000
2/7/84	RCFC 83	1470	RCFCD	1:19,200
2/23/84	RCFC 83	1645	RCFCD	1:19,200

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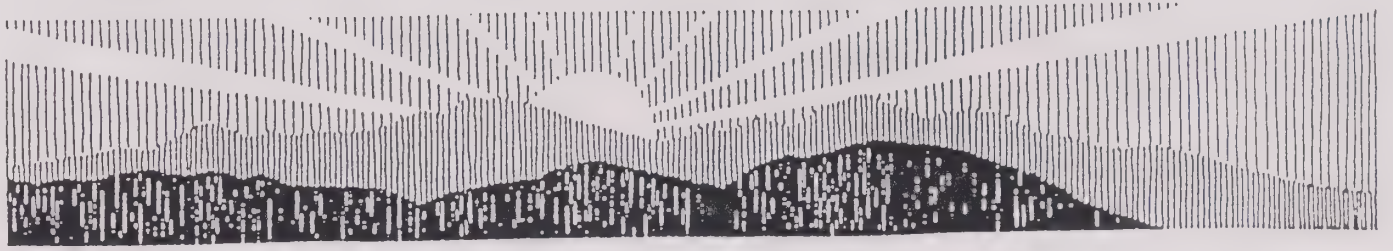
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## **PART II**

# **CALIMESA GENERAL PLAN**



**GENERAL PLAN  
for the  
CITY OF CALIMESA**

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Prepared for:

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City of Calimesa  
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Calimesa, California 92320*

Prepared by:

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April 4, 1994





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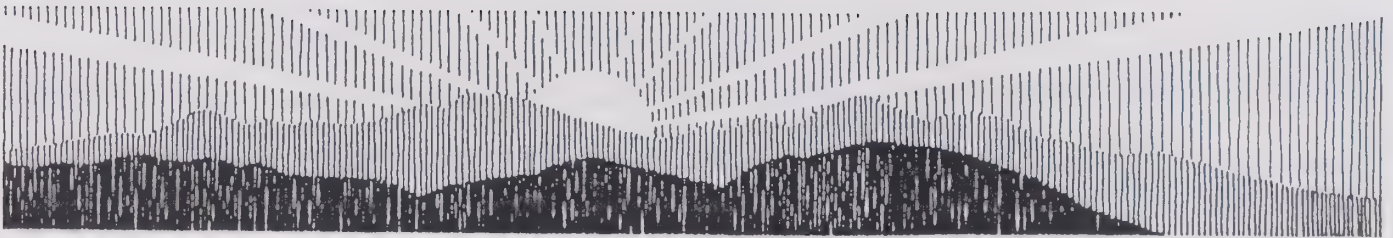
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## INTRODUCTION

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The *Calimesa General Plan* is a long range comprehensive plan designed to control and regulate growth in the area and to maintain the quality of the environment. The General Plan contains goals, policies, and programs to guide future development and change in the City. The goals and policies of the General Plan serve as the constitutional framework for the City. They provide planning direction for City operations and programs and serve as guidelines for all public and private decision-making.

*Section 65302 et seq. of the California Government Code* requires that a general plan contain seven elements: 1) Land Use, 2) Transportation, 3) Housing, 4) Conservation, 5) Open Space, 6) Noise, and 7) Safety. This General Plan contains these seven elements with the requirements for the open space and conservation elements combined into the Resource Management Element. Aside from these elements, an Air Quality Element has been adopted as part of the General Plan. The following elements will comprise the Calimesa General Plan in accordance with the State General Plan Guidelines:

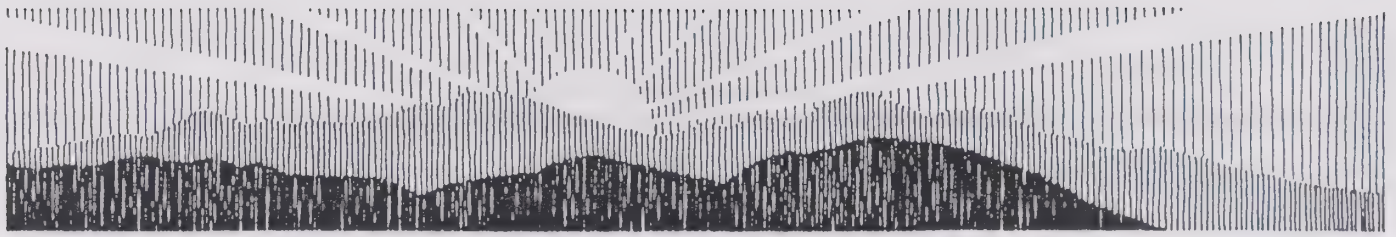
- **Land Use Element** - The Land Use Element designates the general location, distribution, and extent of existing and proposed land uses for the City and indicates standards for population density and development intensity.
- **Transportation Element** - The Transportation Element identifies the general location and the extent of existing and proposed roadways, highways, railroads and transit routes, terminals, and public utilities and facilities.
- **Housing Element** - The Housing Element evaluates the existing and projected housing needs of the City and establishes goals, policies, objectives, and programs for the preservation, improvement, and development of housing to meet local and regional housing needs.
- **Resource Management Element** - The Resource Management Element meets the State-mandated requirements for the conservation and open space elements. The Element provides for the conservation, development, and use of natural resources including water, wildlife, land and other natural resources. In addition, the element details plans and measures for the preservation of open space designed to promote the management of natural resources, outdoor recreation, and public health and safety.

- **Safety Element** - The Safety Element establishes standards and plans for the protection of the community from a variety of hazards including earthquake, flood, fire, and geologic hazards.
- **Noise Element** - The Noise Element examines the existing and future noise environment and major noise sources in the City. The Element contains an goals and policies for maintaining a noise compatible environment and standards to prevent future noise problems.
- **Air Quality Element** - The Air Quality Element is not a State mandated element. Adoption of the Air Quality Management Plan for the South Coast Air Basin required cities within the basin to develop Air Quality Elements to assist in improving regional air quality. The Air Quality Element contains a discussion of local and regional air quality, stationary and mobile emission sources, and programs to reduce pollutant emissions generated within the City.

### ***Planning Process***

The Calimesa General Plan reflects the needs and objectives of residents and businesses in the City. To encourage public input for a representative plan, the City Council elected to establish a General Plan Advisory Committee (GPAC) to aid in the development of the City's first General Plan. The members of the GPAC came from different sectors of the community and represented a wide range of issues and concerns in Calimesa. They identified issues and opportunities in the City, drafted goals and policies for each General Plan Element, and refined the land use plan to respond to the City's goals and policies. In addition, a city-wide survey was conducted to determine the needs and preferences of residents.

The Planning Commission and the City Council will hold joint study sessions, and community workshops will be subsequently held during the formal public review period. This will lead to additional public participation and involvement in the development of the *Calimesa General Plan*. Public hearings will be held prior to adoption of the General Plan, to better reflect the direction and future environment that the City residents want to achieve by the year 2010. Subsequent revisions and amendments to the Calimesa General Plan shall follow the procedures outlined in Government Code Section 65350 et. seq.



## LAND USE ELEMENT

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### INTRODUCTION

Of the seven state mandated elements of the General Plan, the Land Use Element represents the graphic blueprint for the future development of the City of Calimesa. The Land Use Element sets forth goals, policies, and objectives for the long term physical development of the community. It addresses issues regarding existing and future development, land use compatibility, availability of public services and infrastructure, public safety, and the balance of resource conservation and urban development. The Element contains the Land Use Map which establishes a pattern for the orderly development of land and will be used to guide the development of the City.

### Relationship to the General Plan

Section 65302(a) of the Government Code requires the Land Use Element to:

- Designate the proposed general distribution and general location and extent of land uses for housing, business, industry, open space, agriculture, natural resources, recreation, public facilities, and other categories of public and private land use;
- Include a statement establishing standards of population density and building intensity for each land use category covered by the plan; and
- Identify land uses in those areas subject to flooding.

Additionally, the State General Plan Guidelines suggest that Land Use Elements should:

- "Promote a balanced and functional mix of land uses consistent with community values;
- Reflect the opportunities and constraints affecting land use identified in other elements of the General Plan; and
- Reduce the loss of life, injury, damage to property, and economic and social dislocation resulting from flooding."

This Element meets these requirements and will serve as a guide for decision-making on land use issues and future development. It responds to opportunities for growth and development in the City



with respect to existing land uses and resources. The goals of the Land Use Element address environmental and economic constraints related to topography, geology, flooding potential, availability of services and infrastructure, and other factors which may constrain future development. The Land Use Map provides the framework for development. The Map establishes classifications of land uses, designates the general location and distribution of these uses, and sets standards of population density and development intensity for each identified land use type. The Map is designed to accommodate the economic and social activities of the community through the provision of areas for these activities.

Policies in the Land Use Element and the Land Use Map bring together the different elements of the General Plan and are consistent with them. The Housing Element contains policies for residential development. The Transportation Element provides for the development of a transportation network that will support the ultimate land uses under the Land Use Map. The Safety Element identifies hazards that need to be considered in land use planning for the City. The Noise Element identifies areas where noise sensitive development should be avoided. The Calimesa Land Use Element addresses these issues, as well as concerns relating to growth, public services, infrastructure, and economic development.

## **SUMMARY OF ISSUES**

Land use concerns in Calimesa deal with the preservation of existing qualities which make the City a desirable residential community. There are opportunities for maintaining the quality of life in Calimesa and at the same time addressing the needs and issues of the City. These issues are summarized below:

- Land Area: The City of Calimesa is comprised of approximately 9,490.25 acres of land or 14.8 square miles. Nearly 73 percent of the land (6,913 acres) is undeveloped with a significant portion of that vacant land comprised of large lots with 10 acres or more.
- Population: The current population of the City is approximately 7,309 people. Estimates of growth show a resident population of 8,575 persons by the year 2000 with a housing stock of 3,324 units.
- Existing Development: Calimesa is located in the high desert and its residents enjoy a small town atmosphere. Development is concentrated in the City center, with outlying rural lots and agricultural uses. The community is surrounded by hillsides with the majority of the urban development occurring on land with slopes of less than 15 percent. Low density residential and commercial development is concentrated along Interstate 10, in the north-central portions of the city. Development is predominantly low density single-family units, neighborhood commercial uses, and supporting public and

institutional uses. Development of the Oak Valley area is anticipated to be a major planning factor in the coming years.

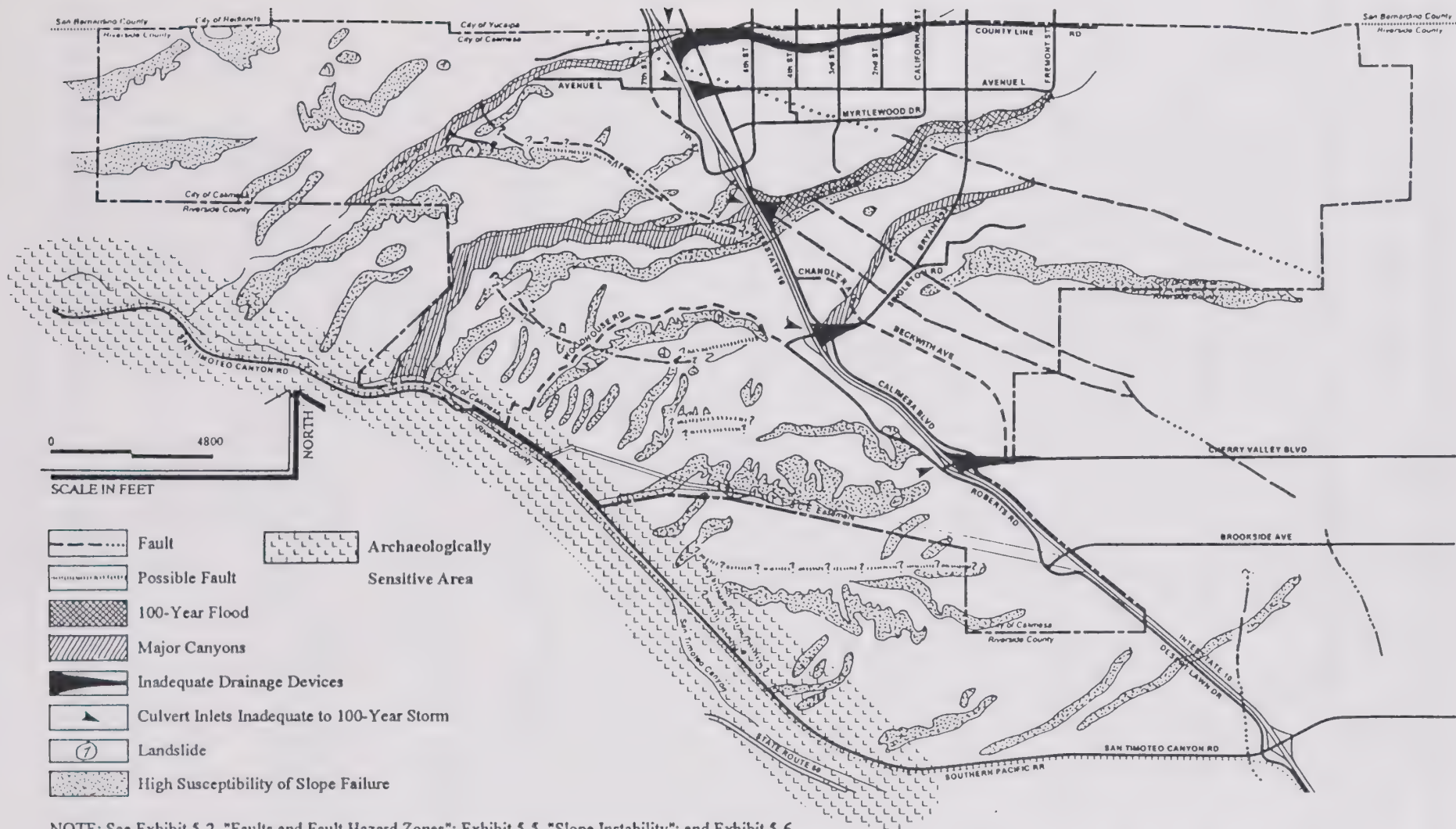
- Rural Atmosphere: The friendly, small town atmosphere has been enjoyed by Calimesa residents since its beginnings. It is the desire of the City to maintain and retain those qualities of life associated with a small community as the City develops. Currently, Calimesa is predominantly developed with single-family residences on rural and urban sized lots. The urban size lots are not large enough to have farm or equestrian uses, but residents of those lots enjoy the country atmosphere created by lots which are able to have equestrian and farm uses. Future single-family developments will need to provide an appropriate mix of urban and rural lot sizes in order to maintain the country atmosphere.
- Equestrian Uses: Many residents of Calimesa maintain an equestrian lifestyle. This lifestyle consists of lots which are large enough to accommodate the keeping of horses and other equine, and the availability of areas to recreate. Areas of Rural and Estate Residential development should allow for continued equestrian uses. Commercial and industrial uses should allow for businesses such as feed and tack stores and the like.
- Development Standards: Standards for development in the City need to address the need to supply adequate sewer, water, and storm drain facilities to proposed development as well as meet the current need for existing development within Calimesa. In addition, standards for the appearance of structures, the relationship of one building to another, the buildings' relationship to the street, and buffering of land uses need to be considered.
- Commercial and Industrial Uses: Commercial and industrial development often follows residential development. As the City of Calimesa expands its residential base, there will be a need to provide commercial and industrial uses to serve residential uses within the City. Adequate land needs to be set aside, at appropriate locations, to provide space for commercial and industrial development. Development of commercial and industrial land within the City should focus on commercial and industrial uses which provide employment opportunities and a sound tax base.
- Future Development: The current population and estimated population at buildout of the City will have a direct effect upon the kind of commercial and industrial development which the City can expect to attract. The region in which the City is located and the current state and pace of development will also have a direct and indirect effect upon the kind and type of commercial and industrial development which the City can expect to attract.

- Public Services: While there are public services and infrastructure in the developed areas of the City, the lack of availability of these services in outlying areas could lead to higher development costs. Water and sewer capacities must be planned in concert with new development. Development within the City needs to be supported by adequate infrastructure and public services.
- Infrastructure: Infrastructure must be supplied concurrent with development. Adequate levels of service need to be established for various areas of the City which enhance or maintain the quality of life, while providing necessary facilities for water, sewer, storm drain, police, fire, and access.
- Significant Resources: Identified plant and animal habitat in and outside of preserve areas will help to promote the country atmosphere and maintain the quality of life. Development potential within the 100-year federally designated flood zone will be severely restricted but will add to the rural quality of life through low intensity development. Areas with concentrations of archaeological material, such as the area adjacent to San Timoteo Canyon, will constrain or severely limit development. Steep hillsides, significant ridgelines and knolls will limit potential areas of development but will also help to promote the country atmosphere.
- Development Constraints: Constraints to future development are posed by flood hazards, earthquake faults, landslide areas, archaeologically and biologically sensitive areas. The general areas of these hazards and archaeological resources are shown in Exhibit 1-1. Sensitive biological resources may be found throughout the vacant areas of the City. These issues are further discussed in the Safety Element and Resource Management Element Profile Reports. Noise from the freeway and major roadways will also need to be considered in designating land uses along these areas.

## **GOALS AND POLICIES**

Calimesa is a rural area characterized by low density developments and large vacant areas. Land use issues facing the City include the type and condition of existing land uses, the regulation of future developments, the provision of adequate infrastructure and services, and the presence of natural and manmade constraints to urban development. The goals and policies of the Land Use Element address the City's concerns regarding land use compatibility and neighborhood quality, growth management and development. The policies also focus on constraints related to topography, earthquake faults, flooding potential, cultural and biological resources, and the availability of services and infrastructure.





NOTE: See Exhibit 5-2, "Faults and Fault Hazard Zones"; Exhibit 5-5, "Slope Instability"; and Exhibit 5-6, "Flood and Inundation Hazards" of the Profile Report for more detailed information.

SOURCE: Leighton and Associates, Inc.



## **Rural Atmosphere and Quality of Life**

**GOAL 1:** Preserve and enhance the rural atmosphere and quality of life in Calimesa.

### **Policies:**

- 1.1 Preserve the natural character and visual quality of the hillsides through sensitive site design and grading.
- 1.2 Encourage protection of the natural environment through good planning and design.
- 1.3 Where urban development is proposed, designate low density residential areas in order to promote and maintain the City's rural character.
- 1.4 Protect existing stable residential neighborhoods through maintenance and upkeep.
- 1.5 All development shall comply with the City's development standards and the Calimesa Municipal Code, including, but not limited, to the subdivision ordinance, grading ordinance, zoning ordinance, sign ordinance, noise ordinance, and hillside development standards.
- 1.6 For safety purposes, street lighting in residential areas shall be located at all intersections. Accessory lighting for residential, commercial and industrial uses shall be shielded from adjacent properties.
- 1.7 Residential developments on areas with the Residential Low Density land use designation shall have lot sizes equal to or greater than 7,200 square feet.
- 1.8 Residential developments on areas with the Residential Medium and Residential High land use designation shall have lot sizes equal to or greater than 5,000 square feet.
- 1.9 In areas with the Residential Estate and Residential Rural designation, paved streets and rolled curbs and gutters shall be provided. In areas where on-street drainage is needed, vertical concrete curbing may be required.
- 1.10 In areas with the Residential Low, Medium and High designation, sidewalks adjacent to the curb shall be required, except where parkway sidewalks are necessary to maintain continuity with existing development. Vertical concrete curbs and gutters are required on all streets in these areas.
- 1.11 Work with adjacent cities and communities on land use planning for the preservation of the rural community character of the area.



## **Growth Management**

**GOAL 2:** In order to preserve the quality of life, the character of the community, and to manage growth in Calimesa, allow development which is contiguous or close to existing development and in conjunction with the availability of infrastructure, public facilities and services.

### **Policies:**

- 2.1 In Residential Low Medium, Residential Medium, and Residential High designations and outside of adopted specific plan areas, development shall be at least within 1/4 mile of an existing public sewer, water line, and improved roadway, in order to discourage "leap frog" development and the costly extension of services and infrastructure.
- 2.2 Require that development pay its "fair share" of the cost of providing adequate public services, infrastructure, and facilities.
- 2.3 Future developments shall provide adequate infrastructure to serve the development (i.e. curbs and gutters, sidewalks, street lights, water service, sewer service or septic systems, etc.) prior to occupancy.
- 2.4 Locate commercial and industrial development in areas where street rights-of-way and capacity are available, as well as sufficient infrastructure and public services.
- 2.5 Locate high density residential developments in areas served by existing and/or planned roadways, transit routes, and infrastructure.
- 2.6 Consider annexation of land within the City's sphere of influence (i.e., portions of Oak Valley not included in the City, area along San Timoteo Canyon Road to County Line Road) in order to protect natural resources, and provide reasonable growth for Calimesa.

## **Land Use Compatibility**

**GOAL 3:** Locate land uses to achieve maximum compatibility while improving or maintaining the desired quality of life.

**Policies:**

- 3.1 Avoid land use conflicts and incompatibilities between developments by providing landscaped setbacks and buffers, site design and architectural features between existing incompatible land uses and new development.
- 3.2 Encourage and facilitate the transition of non-conforming land use to conforming land uses.
- 3.3 Differing land uses shall be adequately buffered including but not limited to building setbacks, landscaping, walls or fences, density/intensity reductions, reduced hours of operation for commercial and industrial uses, shielding of lighting, and the like.

**Commercial and Industrial Development**

**GOAL 4:** Commercial and industrial developments shall be designed to serve the needs of Calimesa and the subregion.

**Policies:**

- 4.1 Commercial and industrial developments shall be designed to reflect the rural and country atmosphere of Calimesa, (using building materials such as exposed heavy timbers, use of rustic or weathered wood and new and used bricks and stone and the like) while maintaining good planning and design principles and sound development practices.
- 4.2 Encourage the development of commercial and industrial centers to expand the employment and fiscal base of the City.
- 4.3 Promote the redevelopment and revitalization of older commercial and industrial uses to better serve the community.
- 4.4 Encourage existing and new employers in the City of Calimesa to hire local residents when seeking to fill employment positions.
- 4.5 Commercial or industrial developments on lots greater than 5 acres in size shall be required to prepare master development plans including, but not limited to, the location of buildings, landscaping, parking, driveways, signage, architectural character and development phasing.

- 4.6 Prior to or concurrently with a development application for industrial or commercial development of substantial size, market feasibility studies demonstrating the economic viability of the proposed use shall be prepared.

### **Preservation of Natural Resources and Environmentally Sensitive Areas**

**GOAL 5:** Preserve the natural beauty, minimize degradation of the Calimesa area, and provide protection for environmentally sensitive resources.

#### **Policies:**

- 5.1 To ensure that hillside areas are preserved and protected, all development in areas having a slope of 25 percent or greater shall comply with the Calimesa Hillside Development Guidelines.
- 5.2 Areas with slopes of 45 percent or greater shall not be considered buildable.
- 5.3 Graded areas shall be revegetated with native plants compatible to the area to prevent erosion.
- 5.4 Development shall be prohibited in areas containing sensitive biological resources and habitats, cultural resources, groundwater recharge areas, prominent ridgelines, unless adequate protection and/or preservation is provided.
- 5.5 Stepped or multi-level foundations shall be used in hillside development.
- 5.6 On a property or contiguous properties, which are proposed for development and have an average slope of 25 percent or greater, minimum lot sizes may be reduced below those required by the general plan and the zoning in order to:
- preserve steep slope areas;
  - avoid known faults and landslides;
  - preserve significant biological and drainage areas; and
  - add open space to existing contiguous open space lands.

In no case, shall development densities on the entire property exceed the general plan land use designation.

However, in no case shall the density exceed the general plan land use designation.



- 5.7 The City shall consider the use of a Planned Development zone which would encourage creative site design, in order to preserve significant natural resources, slopes in excess of 45 percent, and assist in creating a site plan which provides an acceptable level of risk protection for future development from the effects of earthquakes and earthquake faults, major drainage flows, landslides, and the like.

## **Water Services**

**GOAL 6:** Ensure existing and future land uses have an adequate water supply system capable of meeting normal and emergency demands.

### **Policies:**

- 6.1 Development shall be constructed with adequate water supplies.
- 6.2 Development shall be required, when possible, to enhance local groundwater supplies through designs which promote on-site recharge and minimize impermeable ground coverage with landscaped areas, open space or recreation areas.
- 6.3 Promote water conservation for all land uses through a public education program which addresses conservation practices such as xeriscape and drought tolerant landscaping. City facilities shall be designed and operated with water conservation practices and programs.

## **Sewer Service**

**GOAL 7:** Establish, extend, maintain and finance a safe and efficient wastewater collection, treatment and disposal system which maximizes treatment and water recharge, minimizes water use, and prevents groundwater contamination.

### **Policies:**

- 7.1 Protect the quality of local groundwater supplies from septic system contamination.
- 7.2 Development shall provide for the adequate collection, treatment and disposal of the wastewater in accordance with the Santa Ana Regional Water Quality Control Board requirements.
- 7.3 Encourage existing development to connect to the public sewer system.
- 7.4 In residential areas with constrained topography and with lot sizes of 1/2 acre or greater, and not adjacent to or within a reasonable distance of a public sewer line,

septic systems may be allowed. All new residential development less than 1/2 acre shall be required to connect to the public sewer system.

- 7.5 Require, through conditions of approval, that private development participate in improvements to the Yucaipa Valley Water District sewage collection system and subregional treatment plant system through sewer connections fees, construction and improvement of sewer system facilities, and the like.

### **Solid Waste Disposal**

**GOAL 8:** In compliance with state law, ensure solid waste collection, siting and construction of transfer and/or disposal facilities, operation of waste reduction and recycling programs, and household hazardous waste disposal programs and education are consistent with the County Solid Waste Management Plan.

#### **Policies:**

- 8.1 Waste reduction and recycling shall be promoted to achieve a twenty five percent reduction in the solid waste produced in Calimesa by 1995 and a fifty percent reduction by 2000.
- 8.2 Individual developments shall be required to dispose of any hazardous materials generated in accordance with state and federal law.
- 8.3 Develop public information programs to promote greater community awareness and involvement in waste reduction and recycling.

### **Storm Drainage**

**GOAL 9:** Ensure that adequate flood control facilities are provided prior to or concurrent with development, in order to protect the lives and property of Calimesa residents.

#### **Policies:**

- 9.1 Provide for the adequate drainage of storm runoff to protect the lives and property of residents.
- 9.2 Monitor and maintain drainage and flood control facilities to ensure adequate capacity.
- 9.3 New development shall bear the cost of new facilities and upgrades to existing drainage facilities to accommodate the additional storm runoff caused by the development.

- 9.4 Adequate storm drain and flood control facilities shall be operational prior to the issuance of certificates of occupancy for new development.
- 9.5 Designate, preserve and acquire land for necessary flood control facilities, in accordance with the City's Master Flood Control and Drainage Plan.
- 9.6 Development within the 100-year flood plain, as designated by the Federal Emergency Management Agency (FEMA), shall be consistent with the requirements of FEMA.
- 9.7 Seek to preserve drainage courses in their natural condition, while providing adequate safety and protection of property.
- 9.8 Street crossings of significant drainage courses should be, at the minimum, designed for a 15-year frequency storm.

## **Utilities**

**GOAL 10:** Ensure the provision of adequate supplies of natural gas and electricity from public utility purveyors and the availability of communications services to residents of Calimesa, while protecting natural vistas and night skies.

## **Policies:**

- 10.1: Require that all new developments adjacent to or near natural gas lines, install and connect to natural gas lines.
- 10.2: Require new development to underground on-site telecommunication connections.
- 10.3: Actively encourage and support the undergrounding of existing overhead utilities.
- 10.4: Prepare a five-year capital improvement program which provides for the maintenance and upgrading of existing infrastructure to adequate levels of service and the installation of new facilities, as needed.
- 10.5: Encourage the preparation and adoption of capital improvement programs for other agencies and districts responsible for the provision of infrastructure systems in the City.

## **Infrastructure**

**GOAL 11:** Ensure, plan, and provide adequate infrastructure for all new development, including but not limited to, integrated infrastructure planning, financing and implementation.



**Policies:**

- 11.1: Coordinate the provision of all public utilities and services to ensure a consistent, complete and efficient system of service to all residents.
- 11.2: New development shall pay its "fair share" for the regional infrastructure system by providing appropriate dedications, improvements and/or fee assessment districts and the like.
- 11.3: New development projects shall provide for the extension of infrastructure to serve the development.

**Public Services**

**GOAL 12:** Plan for the location of convenient and adequate public services, such as libraries, schools, and fire stations to serve the existing and future residents of Calimesa.

**Policies:**

- 12.1: Cooperate with the Riverside City and County Public Library System in providing the needed library services and facilities to serve Calimesa residents.
- 12.2: The City shall reserve future sites for public facilities through purchase, eminent domain, dedication, donation, or a combination of these procedures.
- 12.3: Provide and maintain existing infrastructure and enhance public service levels to meet the needs of Calimesa residents.

**School Services**

**GOAL 13:** Coordinate planning and development proposals with the affected school district to ensure that adequate school facilities and services can be provided in a timely manner.

**Policies:**

- 13.1: Prior to project approval, allow the affected school district to review proposed developments and programs in the City which are likely to affect school services or facilities.
- 13.2: Prior to the approval of projects which are likely to generate students, the applicant shall be required to mitigate school impacts to the full extent permitted by state law

through land dedications, payment of fees, participation in a special assessment district, or any combination of the above.

- 13.3:** When proposed developments cannot be served by existing school facilities and services, the City shall work with the developer and the school district in exploring options for service provision or facility funding.
- 13.4:** The City shall work with the school districts to discourage the designation of attendance boundaries which split neighborhoods.

## **LAND USE PLAN**

The Land Use Plan of the City of Calimesa identifies the types of land uses that are desired in the City, as well as the density and intensity of development for those land uses. The Plan calls for the development of land uses which will support future growth and development in the area, as well as promote the country atmosphere that has made Calimesa a desirable community for many individuals.

A variety of residential lot sizes are allowed in order to provide for both rural and urban residential development. Urban lot sizes must be of a sufficient size to accommodate a house and yard area at permitted densities. Rural lots must be of a sufficient size to permit the keeping of equestrian and farm type uses, while maintaining a residential atmosphere.

Commercial and industrial areas shall be designated to provide retail shops and professional service offices to serve the residential areas of the City. The commercial and industrial areas will also provide local employment opportunities and a sound tax base for the City.

Development within the City must comply with all laws relating to development, including but not limited to the goals, policies and objectives of this element and other elements of the General Plan. Requirements for development which are within the purview of the City of Calimesa shall take precedence over less restrictive requirements of a special district.

### **Land Use Categories**

Land use categories are established to fulfill the goals, policies and objectives of the Land Use Element and various other elements of the General Plan. The categories identify the land use, describe the type of development expected, and identify the allowable development intensity. Development intensity refers to the size or degree of development possible within a land use category. It uses standards relating to the number of units per acre, the number of persons per acre, or the ratio of the building floor area to the total lot area (floor area ratio or FAR). Densities of development in the residential categories are shown in the number of dwelling units and persons per gross acre of development. Intensities of development in the commercial and industrial categories

are expressed in floor area ratio (FAR). The land use categories of the General Plan Land Use Map are divided into five categories:

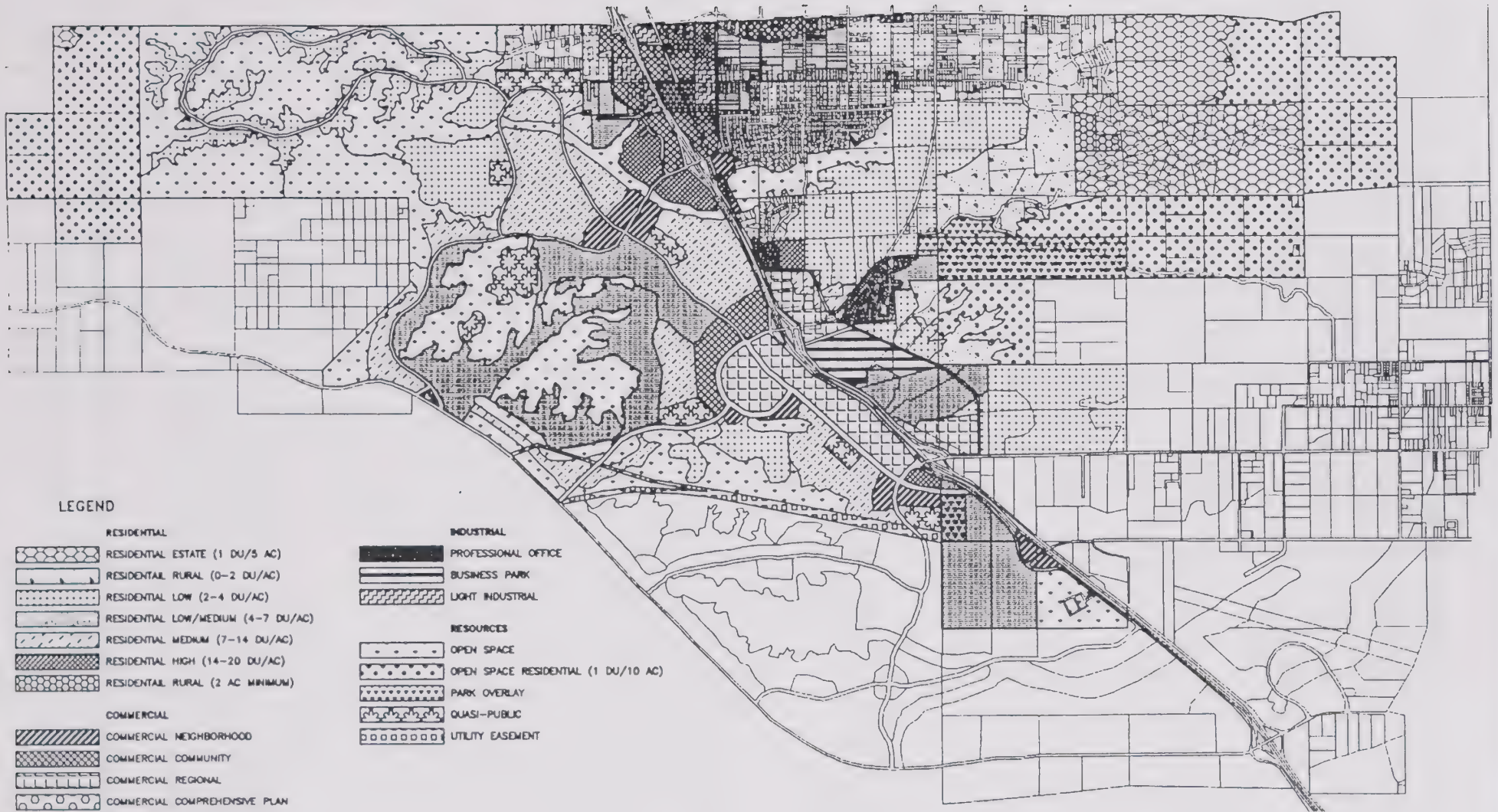
- Residential
- Commercial
- Industrial
- Resources
- Specific Plan Areas

Public facilities to serve the City are permitted by conditional use permit in all of the categories.

Exhibit 1-2 is the Land Use Plan for the City. Estimates of buildout are provided in Table 1-1. It shows that approximately 20,350 dwelling units and 23 million square feet of non-residential structures may be built in the City. The floor area buildout assumes maximum intensity development even if this is unlikely to occur. Lot coverage, setbacks, building heights, parking provisions, and other development standards are expected to discourage development at full buildout.

TABLE 1-1 BUILDOUT CAPACITY			
Land Use Designation	Acres	Density	Buildout Capacity*
<b>Residential</b>			
Residential Estate	635.19	5 ac/du	127 du
Residential Rural	803.84	0-2 du/ac	804 du
Residential Low	1,290.99	2-4 du/ac	3,873 du
Residential Low/Medium	1,146.87	4-7 du/ac	6,308 du
Residential Medium	670.28	7-14 du/ac	7,038 du
Residential High	<u>122.71</u>	14-20 du/ac	<u>2,086 du</u>
Residential Total	4,669.88		20,236 du
<b>Commercial</b>			
Commercial Neighborhood	136.58	FAR 0.25	1.5 million sf
Commercial Community	230.36	FAR 0.50	5.0 million sf
Commercial Regional	259.00	FAR 0.75	8.5 million sf
Office Professional	<u>38.48</u>	FAR 0.50	<u>0.8 million sf</u>
Commercial Total	664.42		15.8 million sf
<b>Industrial</b>			
Business Park	78.58	FAR 0.50	1.7 million sf
Light Industrial	<u>16.51</u>	FAR 0.50	<u>0.3 million sf</u>
Industrial Total	95.09		2.0 million sf







**TABLE 1-1  
BUILDOUT CAPACITY**

Land Use Designation	Acres	Density	Buildout Capacity*
<b>Resources</b>			
Open Space	1,916.66	(20 ac/du)	(96 du)
Open Space Residential	1,202.66	10 ac/du	120 du
Public	<u>238.52</u>	FAR 0.50	<u>5.2 million sf</u>
Resources Total	3,357.84		5.2 million sf & 120 du
Streets	<u>703.02</u>		---
<b>TOTAL</b>	9,490.25		20,356 du & 23 million sf
du - dwelling unit                  ac - acre                  sf - square feet                  FAR - floor area ratio * based on average unit density and maximum FAR Source: David Evans and Associates, Inc., 1993.			

## RESIDENTIAL

The following six (6) residential land use categories are established. Residential development is also permitted within some of the specific plan areas and within the Open Space Residential designation.

### Residential Estate (RE) (1 dwelling unit per 5 gross acres)

Residential Estate is characterized by single-family detached homes, and buildings and structures related to agriculture, farm use, animal keeping, and equestrian uses. Minimum lot sizes of 5 gross acres are required. The population density within this category is approximately 2.4 persons per 5 acres. This designation helps preserve the rural character of Calimesa by permitting existing Residential Estate uses to continue and expand. Homes and buildings constructed within this designation may have a variety of styles and construction, but are primarily of a residential nature. Homes constructed in this category are likely to be served by streets which may not have curbs, gutters, sidewalks or street lights. Equestrian/pedestrian trails are likely to be found. The lots may be served by septic systems and well water, if standards for provision and service, as required by the YVWD, the Santa Ana Regional Water Quality Control Board, and/or the City, are met. Precise determination of any development shall be on the basis of a detailed slope analysis, biological, archeological, and paleontological assessment prior to approval of any development.

### Residential Rural (RR) (0-2 dwelling units per gross acre)

Residential Rural is characterized by single-family detached homes on half acre and one acre lots. The population density within this category is approximately 5 persons per acre. This designation provides for light agricultural uses, in conjunction with single-family residential units. It also permits residential subdivisions with equestrian uses. The intent of this category is to preserve the country atmosphere, while providing a transition from Residential Estate into Residential Low. Lots in this



area are likely to be served by both public and private streets, some with curb, gutter, sidewalks, and street lights. Some lots within this category may be served by septic systems and well water, if the standards required by the YVWD, the Santa Ana Regional Water Quality Control Board, and/or the City, are met. Precise determination of any development shall be on the basis of a detailed slope analysis, biological, archeological, and paleontological assessment prior to approval of any development.

Some lots with the Rural Residential designation will be limited to a maximum density of one dwelling unit per two acres, when they have steep slopes or other constraints which would pose hazards to development.

#### **Residential Low (RL) (2-4 dwelling units per gross acre)**

Residential Low is characterized by single-family detached homes on not less than 7,200-square-foot lots to half-acre lots. The population density within this category are approximately 10 persons per acre. Residential developments in this category are intended to reflect a more urban residential character. Housing types will include single-family detached homes on streets with curbs, gutters, sidewalks, and street lights. Lots within this category are expected to be served by a domestic water and sewer system.

#### **Residential Low Medium (RLM) (4-7 dwelling units per gross acre)**

Residential Low Medium will characterize development on lots ranging from 6,000 to 10,000 square feet in size. The population density within this category is approximately 17 persons per acre. Development within this area will consist of single-family detached homes typical of urban residential subdivisions. Public facilities, services and infrastructure shall be available, including water and sewer services, storm drainage, streets, sidewalks and street lights.

#### **Residential Medium (RM) (7-14 dwelling units per gross acre)**

Residential Medium is characterized by a variety of medium density housing types such as small lot single-family detached, single-family attached units, duplexes, triplexes, four-plexes, multi-unit apartments, and senior housing developments. The population density within this category is approximately 33 persons per acre. Ownership can be through fee simple, condominium or a combination of different types of ownership. This designation is situated in areas adequately served by infrastructure and facilities and near arterial corridors. Developments within this category are expected to be served by the public water and sewer system.

#### **Residential High (RH) (14-20 dwelling units per gross acre)**

Residential High is the high density category. It will allow dwelling unit densities which will provide housing opportunities for high density multiple-family living and provide housing

opportunities for people of low and moderate incomes. This designation allows a wide range of living accommodations ranging from small lot detached housing to apartments. The population density within this category is approximately 50 persons per acre. Building intensity at the lower end of the density range would be appropriate near the Residential Low areas. However, building intensity at the higher end of the range is more appropriate adjacent to commercial areas and major transit routes. Developments within this category are expected to be served by the public water and sewer system.

## **COMMERCIAL**

Four (4) commercial land use categories are established to meet the City's need for retail establishments and professional services. Floor area ratios (FARs) are provided for each category to regulate the intensity of structures that may be built on each site.

### **Commercial Neighborhood (CN) (FAR of up to 0.25)**

Commercial Neighborhood allows for small scale commercial uses (with a 1 to 2-mile service radius) which provide goods and services for the needs of residents in the immediate area. Examples of Commercial Neighborhood uses include grocery stores, supermarkets, convenience stores, drug stores, retail service businesses such as cleaners, office supplies, card shops, offices, clothing stores, and restaurants. Development in this category can occur along arterial roads or in centers of 5 to 10 acres in size located at major intersections. Development in this category is allowed up to a maximum floor area ratio (FAR) of 0.25.

### **Commercial Community (CC) (FAR of up to 0.50)**

Commercial Community provides for large scale commercial activities serving the City or the subregion. This designation will permit commercial activities such as junior department stores, discount or warehouse stores, furniture/appliance outlets, home improvement centers, entertainment centers, and community centers. Development in this category generally occurs on sites 15 to 30 acres in size located at key intersections of major arterial roads or at major off-ramps from the Interstate 10. In addition to being accessible to automobiles and pedestrians, Commercial Community developments may also be served by public transit. Development in this category is allowed up to a maximum floor area ratio (FAR) of 0.50.

### **Commercial Regional (CR) (FAR of up to 0.75)**

Commercial Regional allows for the development of commercial uses which will cater to a wide market, including a full range of retail shops and services within a shopping center environment. Commercial Regional designation is found near major thoroughfares and along the Interstate 10 freeway to permit maximum potential for the dispersal of traffic and sufficient opportunities for ingress and egress. Typically, a population of at least 150,000 persons within 5 to 50 miles of the



site is necessary to support the variety of businesses found in a regional center development. Regional center developments occur on 40 or more acres of land and have 425,000 square feet or more of building area. The maximum intensity of development permitted in the Regional Commercial category is a floor area ratio (FAR) of 0.75.

A "Comprehensive Plan" (CP) designation has been added to the CR area bounded by County Line Road, 3rd Street, Calimesa Channel and mid-block of 4th and 5th Street. This designation calls for a master plan for the area before any development takes place.

#### **Office Professional (OP) (FAR of up to 0.50)**

Office Professional provides for activities such as business and service offices, cultural and community facilities, financial institutions, legal and medical services, restaurants, and other similar uses which together represent major concentrations of community and employment activities. Some limited retail and commercial service uses are permitted. The Office Professional designations are located next to arterial roadways for convenient automobile access and public transit service. Development intensity in this category allows up to a maximum floor area ratio (FAR) of 0.50.

### ***INDUSTRIAL***

Two industrial land use categories are established to complement the commercial uses in the City of Calimesa. Due to the relative location of the City of Calimesa in the region, available and planned street access, and lack of rail service to the area, industrial designations in the Land Use Plan is limited to light industrial businesses and research and development companies, rather than large scale manufacturing uses. The land use designations include Business Park and Light Industrial which will allow for small scale businesses, light manufacturing and assembly, storage, warehousing, research and development and office related uses.

#### **Business Park (BP) (FAR of up to 0.50)**

Business Park provides for activities such as business/professional offices, light manufacturing, storage, warehousing/distribution, wholesaling, small-scale warehouse retail, service commercial services, and public uses. Retail and commercial service uses shall not be greater than 25% of the gross floor area. Business Park areas are generally served by arterial roadways and freeway routes, providing automobile and public transit access. Developments in this category, except for warehousing, are generally within a campus-like setting. Development intensity is set at a maximum floor area ratio (FAR) of 0.50.

#### **Light Industrial (LI) (FAR of up to 0.50)**

Light Industrial will accommodate industrial activities such as low-intensity packing, manufacturing, assembly of non-hazardous products and materials, and limited retail sales and services related to or



supportive of manufacturing activity and employees. Development intensity in this category is set at a maximum floor area ratio (FAR) of 0.50.

## **RESOURCES**

The Resources category consists of land uses which can be defined as a natural resource to the community or region. It consists of two categories of open space. Development within these categories is limited since the primary purpose is the retention and protection of the natural environment.

### **Open Space Residential (OSR) (1 dwelling unit per 10 gross acres)**

Open Space Residential preserves open space while allowing for limited detached single-family development on parcels of 10 acres or greater. The population density of this category is approximately 3 persons per 10 acres. Strict controls on grading for roads and building pads are required to protect the visual and environmental resources in these areas. Future developments within this area shall be in accordance with the Calimesa Hillside Development Guidelines, development standards, and good engineering and land planning practices. Public lands, flood control channels, groundwater percolation basins, agricultural uses, and recreational facilities such as parks, trails, riding schools, stables and facilities, wildlife preserves, archery ranges, golf courses, driving ranges, country clubs and similar uses are permitted within this category. The character of the Open Space Residential areas is intended to remain undisturbed, while permitting limited single-family detached residential development.

### **Open Space (OS) (1 dwelling unit per 20 gross acres)**

Open Space identifies areas within the planning area which have been planned to remain in a natural condition due to environmental and geologic constraints, steep slopes, visual resources and significant ridgelines, archeological and paleontological sensitivity, ecological quality and sensitive biological habitats, and public open space and/or recreational need. The OS category includes rock knolls and outcroppings, and mountainous landforms which have slopes in excess of 15 percent. The extremely rocky subsoil conditions of these areas cannot sustain typical grading for development without massive disruption of existing contours. Strict controls on grading for roads and building pads are required to protect visual and environmental resources in these areas. A maximum density of one dwelling unit per 20 gross acres is permitted under the Open Space category.

Precise determination of any development shall be on the basis of a detailed slope analysis, biological, archeological, and paleontological assessment prior to approval of any development. Land uses such as flood control channels, groundwater percolation basins, agricultural uses, and recreational facilities such as parks, trails, riding schools, stables and facilities, wildlife preserves, archery ranges, golf courses, driving ranges, country clubs and similar uses, are allowed in this

category. The character of Open Space areas is intended to reflect the natural environment, which provides the City its rural atmosphere.

The operation of recreation businesses, such as golf courses, equestrian facilities, private recreation parks and the like, is consistent with the open space preservation goals of the General Plan and these uses are permitted subject to appropriate zoning regulations, such as a conditional use permit. Consideration of expansion of existing facilities, such as adding a clubhouse or other recreation-related facility within golf or country clubs, would be consistent with the open space preservation goals of the Open Space land use category.

#### **Public/Quasi Public (FAR of up to 0.50)**

The Public/Quasi Public designation will accommodate uses such as the Calimesa City Hall, Post Office, fire station, institutional uses (schools, churches), libraries, and other similar development. The maximum floor area ratio for this designation is 0.50.

#### ***SPECIFIC PLAN AREAS (SPA)***

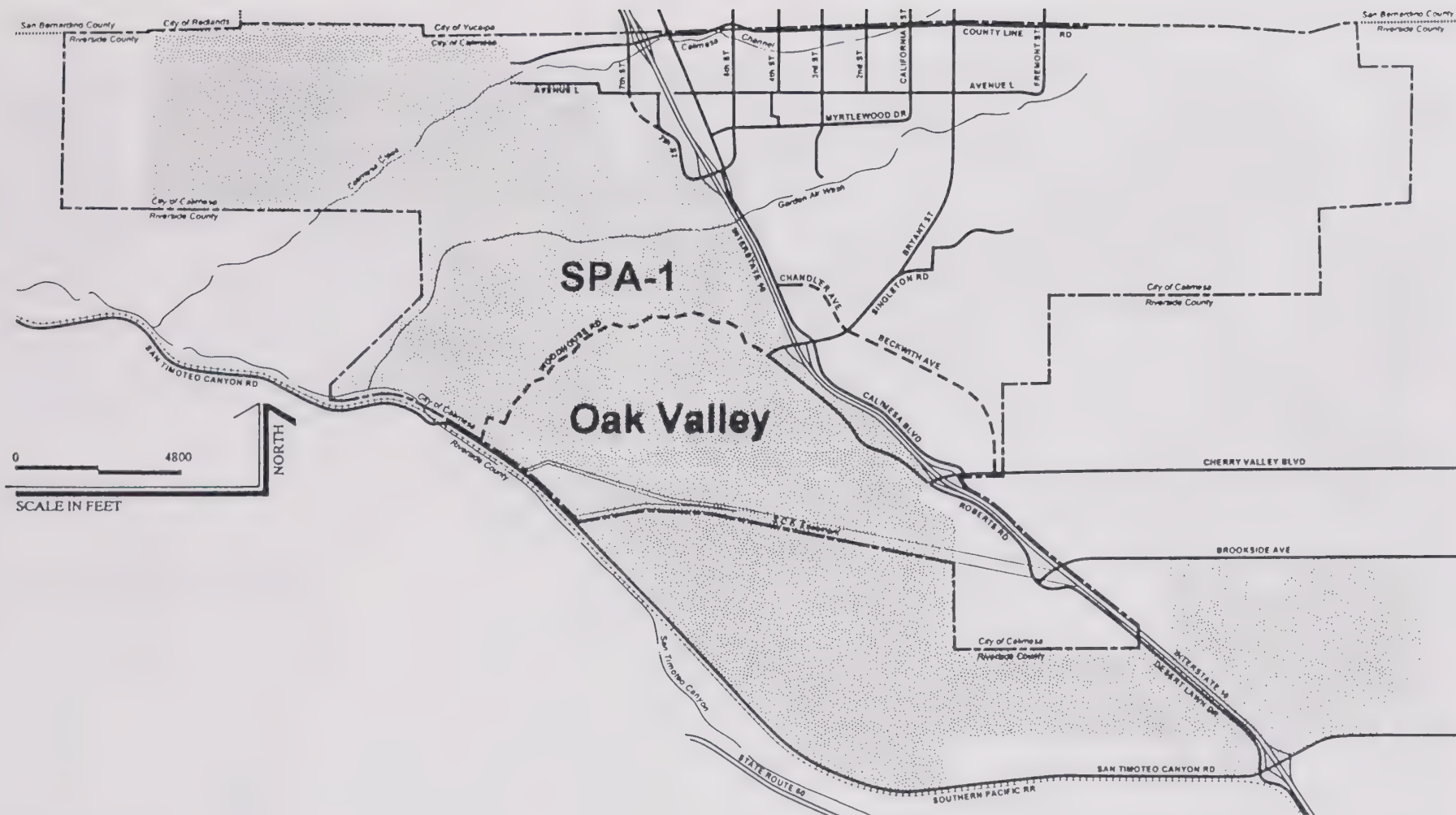
A Specific Plan Area (SPA) is a land use category which allows for designation of areas of the City which are currently under the requirements of a specific plan, such as Oak Valley, and designation of other areas in the City where the flexibility of a specific plan will aid in the development or redevelopment of the area. Specific plans, by state law, may be prepared for any area in the City, but are best utilized when prepared for land which is environmentally constrained, has unique land use concerns, or requires the flexibility of a specific plan to design a development which is mutually beneficial to the City and the property owner. Specific plans are required to be consistent with all elements of the General Plan. Each specific plan area shall be designated with SPA-#, as noted on Exhibit 1-3. Intensities and densities of development shall be determined on a case-by-case basis.

#### ***PARK OVERLAY***

A Park (P) Overlay designation has been provided in areas which should be developed with a park or recreation facility. This designation does not call for the entire site/parcel to be dedicated as a park. Rather, that a portion shall be reserved for a park facility when the parcel is developed. The actual size and location of the park shall be determined during project planning and development review.

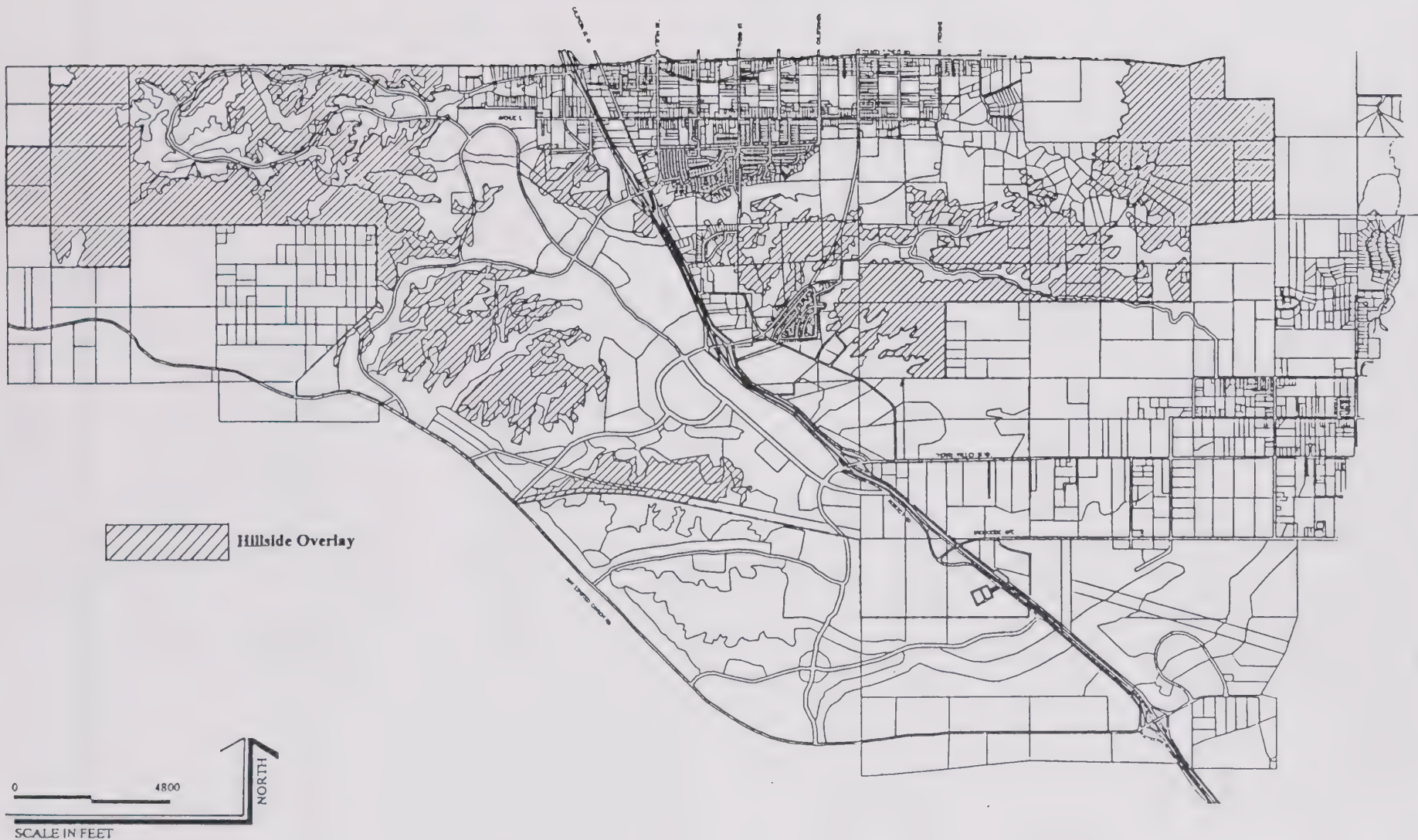
#### ***HILLSIDE OVERLAY***

The Hillside Overlay applies to all areas of the City with slopes of 25 percent or more. Development within these areas shall be subject to the Hillside Development Ordinance of the City and the following standards:













- Field surveys and investigations must be made to identify significant natural resources that may be present on site. Developments should be designed to preserve these resources to the maximum extent feasible. Development should also be sensitive to significant natural resources located in nearby areas.
- Geologic studies shall be conducted in areas where landslide, erosion, liquefaction or other geologic and seismic hazards may be present. Development shall be limited in areas with geologic and seismic hazards which cannot be eliminated by construction methods.
- Developments shall be designed to reduce hazards associated with wildfire and brush fires through the provision of setbacks, access roadways, fire resistive construction, etc. Brush control programs for fire prevention should be sensitive to natural vegetation and special animals.
- Responsible and trustee agencies and local environmental groups should be consulted to ensure the environmental review is thorough, prior to development approval.
- Off-road vehicle use which may destroy existing resources shall be limited in the hillsides.

### ***EARTHQUAKE FAULT OVERLAY***

The Earthquake Fault Overlay applies to earthquake hazard zones along the Banning and Cherry Valley faults, as well as areas within 150 feet of other local faults and photolineaments in Calimesa. Proposed residential projects, critical facilities (fire and police stations, hospitals, emergency centers and shelters), schools and other uses with dependent populations shall be required to submit a geologic report that evaluates the potential for surface rupture and other seismic hazards on site. Development shall be allowed only when the geologic report shows that no surface rupture or extreme seismic hazard exists, as approved by the County and State geologists. If an active fault is determined on site, setbacks and other seismic design considerations shall be required based on the recommendations of the geologic report.

### **IMPLEMENTATION PROGRAMS**

The following implementation programs support the City's Land Use Map and will facilitate the development of land uses as shown on the Land Use Map. Other land use regulations that would achieve the land use goals and policies of the City are also outlined below.

## **1. Development Code**

The primary implementation mechanism for the Land Use Element is the Calimesa Development Code, which provides parcel-specific zone designations for all land within its jurisdiction and subdivision regulations. Section 65860 of the Government Code requires that zoning ordinances be consistent with the city's or county's General Plan once adopted. The City shall update its Development Code, after adoption of the General Plan, to promote consistency and develop requirements for development that would meet the goals and policies of this Land Use Element. All development proposals shall be reviewed for compliance with the City's General Plan, Development Code, and other land use regulations and ordinances.

## **2. Specific Plans**

Specific plans allow flexibility in development that is often superior to what can be achieved through the strict application of conventional land use and development criteria. Greater design flexibility within a comprehensive planning framework allows for clustering of units, mixing of uses and building types, use of special development standards and criteria which can often respond better to the particular features of a site. This flexibility can be used to achieve the maximum building density for a given site while preserving open space and unique natural features. Natural features make Calimesa unique and should be preserved and enhanced, where possible. Greater flexibility can also mean more efficient infrastructure designs through clustered development which can decrease the cost per unit for development projects.

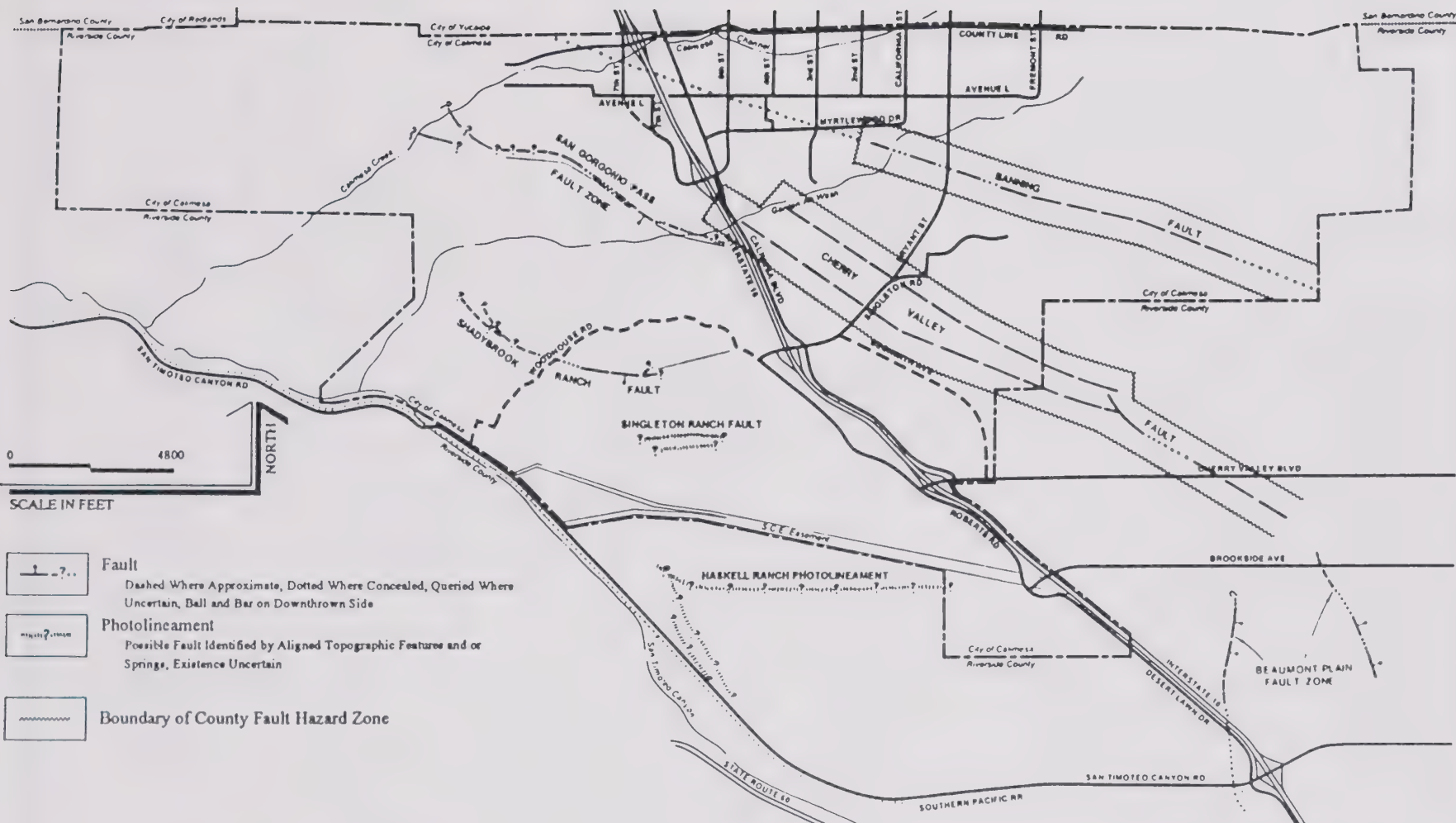
The Oak Valley Specific Plan (SPA-1) shall be used to regulate development within the Oak Valley project area. The City shall allow the establishment of additional specific plans for areas where development would benefit from flexible development standards.

## **3. Growth Management**

The City shall prepare a growth management plan or revise the zoning ordinance to include a growth component to encourage development within existing public service areas. The plan shall coordinate the provision of utilities, infrastructure and public services in newly developing areas, and explore available funding mechanisms for these services. Criteria for evaluating the capacity of existing services shall be developed, so that the pressure for development in outlying areas can be easily analyzed. This shall be coordinated with the various service agencies.

## **4. Capital Improvement Program**

The City shall prioritize the provision and maintenance of public facilities and infrastructure in the area through its Capital Improvement Program (CIP). The CIP provides a schedule of proposed and ongoing capital improvements, including the financial mechanisms to implement these projects. They would include the development and maintenance of parks and recreational facilities, drainage



SOURCE: Leighton and Associates, Inc.





facilities, roadways, traffic and transportation facilities and other city projects and structures. Priorities in the CIP shall be set for projects which will support existing neighborhood uses and encourage orderly growth in Calimesa. This will include, but not be limited to, street, sidewalk, and parkway development and maintenance.

The City shall coordinate the CIP with the programs of other utility and infrastructure agencies serving the City (Yucaipa Valley Water District, South Mesa Water Company, County Department of Public Works, Riverside City and County Public Library System, Caltrans, etc.). This will allow the various agencies to provide concurrent services to the same area, as well as share rights-of-way and reduce costs for improvement or facility provision.

It shall work with power, telephone and cable companies in the undergrounding of existing overhead lines, as well as in providing underground lines to serve new development.

## **5.      Redevelopment Plan**

The City is in the process of taking over the redevelopment area, located east of the Interstate 10 freeway and south of County Line Road, from Riverside County. The City shall work towards completing the redevelopment of existing uses in this area to eliminate the identified conditions of blight.

The Redevelopment Agency shall encourage the rehabilitation and development of commercial and industrial uses in these areas through promotional campaigns to major developer and investors. The Redevelopment Agency shall work with local organizations, such as the Chamber of Commerce, in encouraging commercial investments in the City, employment by local residents, and revitalization of existing businesses. The feasibility of large commercial and industrial developments shall be determined through market feasibility studies, prior to approval.

## **6.      Hillside Development Guidelines and Geotechnical Studies**

The City shall evaluate development on hillside areas according to its hillside development guidelines and/or subsequent guidelines and standards. This is discussed in more detail in the Resource Management Element. Development in other resource sensitive areas shall be reviewed for compliance with the Resource Management Element, prior to approval. Development on areas where geologic and seismic hazards have been identified shall prepare geotechnical studies and comply with the standards discussed in the Safety Element.

## **7.      Area Design Plans**

Aside from the land use categories, the City of Calimesa has identified areas which require a focus of planning activity to improve existing developments and regulate future development. These include:

*SERVICE-COMMERCIAL IMPROVEMENT AREA* - Property south of County Line Road, east of 7th Street, west of 5th Street and north of Sandalwood Drive, commonly known as downtown Calimesa, has been designated as the Service Commercial Improvement Area. This area is characterized by a mix of service commercial, building supply, general and commercial uses, with scattered multi-family and single-family developments. It shall be improved and developed with the intent of strengthening the City's downtown core.

*INTERSTATE-10 CORRIDOR* - The area along the Interstate 10 freeway forms the City's major access and exposure to the regional transportation system. This area is characterized by frontage with good visibility and exposure to I-10. Effective use of this frontage will provide a key opportunity for the City to capture business from the regional market.

The City shall develop plans for these areas in order to capitalize on their assets, and develop land uses which will serve and benefit the community. The plans will include public improvements such as median enhancements, special landscaping, storefronts/facade improvements, compatible architectural styles, and other features which will improve the physical and economic viability of businesses in these areas. The plan may also include measures to promote a pedestrian oriented area and a specific character or identity of development (design theme). Development on sites with 5 acres or more shall also be required to prepare design plans that promote an integrated development that is compatible with adjacent uses and the City's country character.

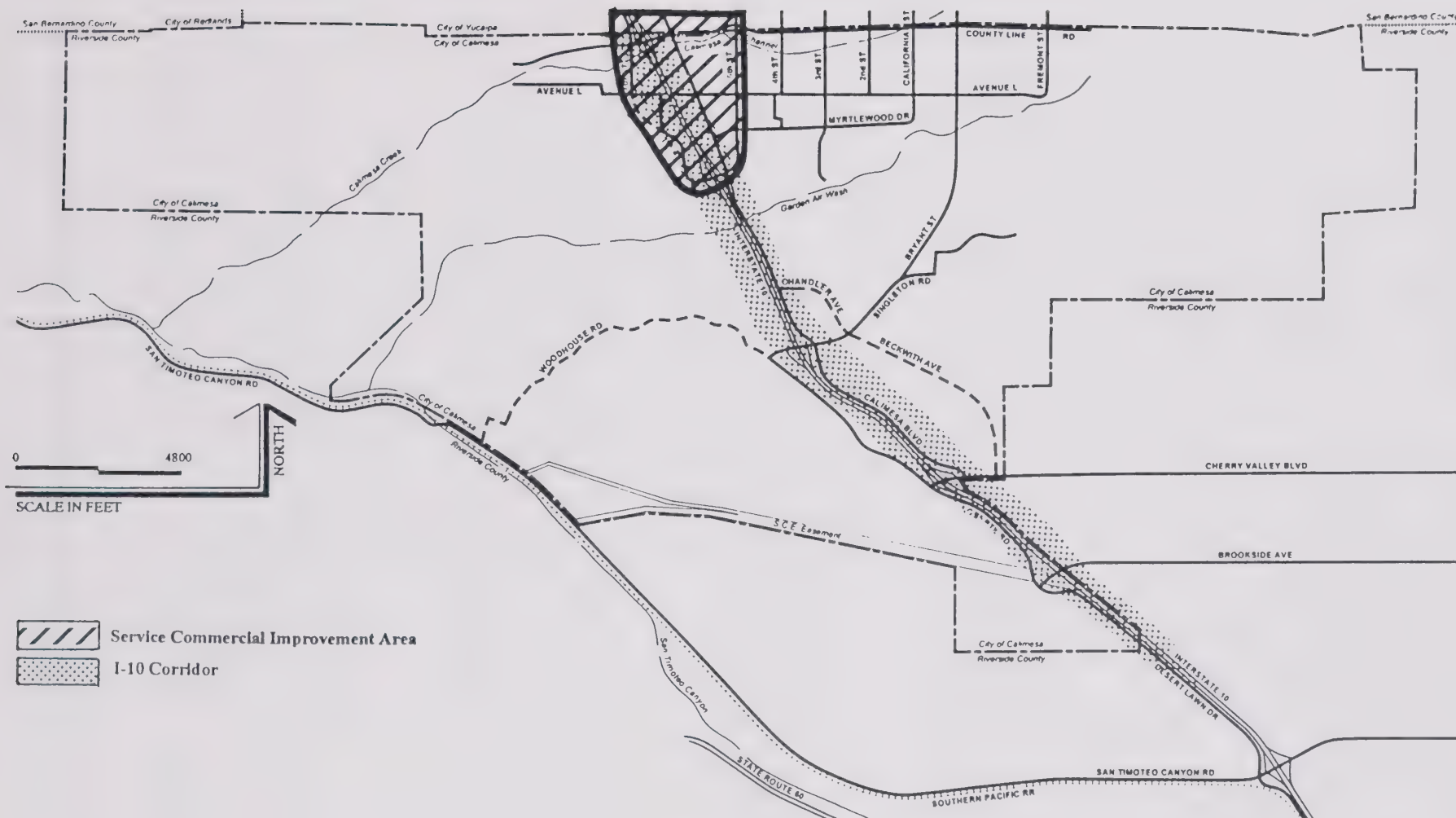
## **8. Non-conforming Uses & Structures Abatement**

Non-conforming uses and structures in the City include lots, structures and land uses which do not meet the established land use regulations in the area in which it is located. These uses may be rendered non-conforming through changes in the Zoning Ordinance or adoption of the General plan and other regulations. Non-conforming uses and structures are generally not required to comply immediately with standards that are adopted after the uses and structures are in place. Rather, amortization periods will allow non-conforming uses and structures to phase in changes or find alternative locations. The City shall identify non-conforming uses and structures and establish measures to bring these uses into conformance in the future.

## **9. Design Review**

The City shall continue to implement the design review process for new development. Design review allows the City to suggest and require changes to the external features of a development, in order to maintain and develop the area's country community character and identity. As part of the design review process, the Planning Department evaluates a proposed project's compatibility with existing development and design standards. Buffers (setbacks, landscaping, walls, etc.) shall be provided in areas where land use conflicts or incompatibilities may arise.







## **10. Service Capacity Monitoring**

The availability of public services to serve new development must be assured before development takes place. The City will review the availability of water, sewer, storm drainage, streets, fire and police services, and other utilities during development review. Service commitment shall be required from the pertinent utility companies. County Sheriff and County Fire Department review shall also be solicited. Plan review may determine the need for upgrades to the street, storm drainage and other infrastructure. The City shall monitor the capacity of existing services and infrastructure, in order to determine if future development can be served by these facilities.

## **11. Annexation Program**

There are unincorporated areas near the City which are served by the same public agencies and service providers and bear a physical, social and economic relationship to the City of Calimesa. The City shall explore the advantages of annexing unincorporated areas within its sphere of influence in order to have greater control on the development of these areas and its impacts on other portions of the City.

## **12. Development Fees**

Costs associated with a specific development should be borne by its users and not by all residents in the City. The City shall regularly review its development impact fee program, to ensure that new development pays its fair share of the cost to provide public services, infrastructure and facilities.

## **13. Utility and Public Service Providers**

The City shall coordinate with the Yucaipa Valley Water District, South Mesa Water Company, the County Public Works Department, the County Sheriffs Department, the County Fire Department, the Santa Ana Regional Water Quality Control Board, Southern California Edison, Southern California Gas, General Telephone Exchange, Yucaipa-Calimesa Joint Unified School District, Beaumont Unified School District, Cherry Valley Sanitation Company, and other public agencies that serve the City for the provision of public services and the regulation of activities.

## **14. Source Reduction and Recycling Element**

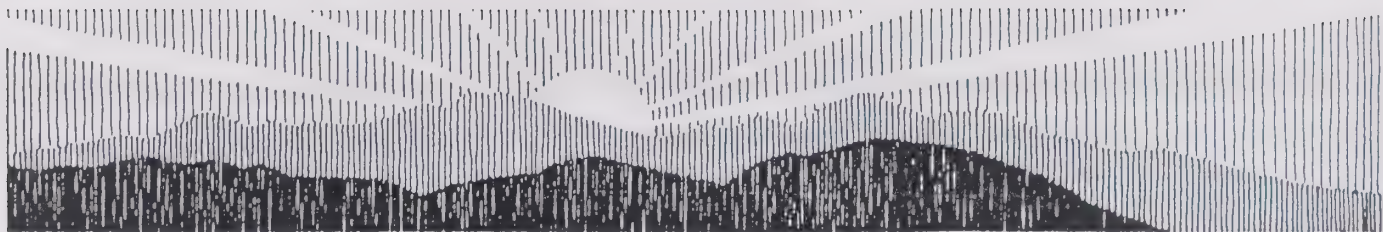
The California Integrated Waste Management Act of 1989 addresses the need for the reduction of solid wastes. It requires counties and cities to achieve a 25 percent waste reduction by 1995 and a 50 percent reduction by the year 2000. These cuts may be implemented by recycling programs, composting, source reduction or other means. The City's Source Reduction and Recycling Element (SRRE) outlines ways to reduce solid waste disposal by as much as 50 percent. These include several options designed to minimize the waste stream from large development projects through



recycling and reuse, backyard composting, use of drought-tolerant landscaping, and public awareness/recognition programs.

The implementation of turf reduction requirements eliminates a significant portion of green waste and also contributes to the recycling cause. The City also coordinates a residential curbside recycling program, hosts a periodic household hazardous waste collection and recycling round-up, and practices in-house recycling measures.

Like water conservation efforts, public information plays a role in changing waste disposal practices to recycling efforts. The City should continue these efforts, in addition to educating the public on the benefits of recycling and practices that reduce solid waste generation.



## TRANSPORTATION ELEMENT

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### INTRODUCTION

The Transportation Element of the Calimesa General Plan is one of the most critical elements because it presents the plan for the overall transportation system in the City. The relationship of the Transportation Element to the Land Use Element is critical since the two must be compatible. The circulation system as presented in the Element must be designed to adequately handle the forecast travel demand based on the expected development as outlined in the Land Use Plan. The Transportation Element considers both the physical requirements of the transportation system (roadway facility type, number of lanes, etc.) and certain operational issues, such as provision of transit services and travel demand reduction programs/policies.

### Relationship to the General Plan

According to California Government Code Section 65302(b), General Plan Circulation (Transportation) Elements shall include "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other public utilities and facilities, all correlated with the Land Use Element of the Plan." The mandatory circulation element issues, or those which must be addressed within the General Plan, are as follows:

- Major thoroughfares
- Transportation Routes
- Terminals
- Other Local Public Utilities and Facilities

Other specific items, which are not mandatory but may be covered within General Plan Transportation Elements, include:

- Other Streets and Highways
- Public Transit Routes, Stops and Terminals
- Bicycle and Pedestrian Routes and Facilities
- Truck Routes and Restrictions
- Parking Facilities
- Transportation System Management and Transportation Demand Management

The Calimesa Transportation Element covers many of the issues listed above. It describes existing circulation conditions in the City, establishes standards for planning improvements to the circulation

system in coordination with planned growth in the City, and provides a basis for the measurement of circulation system performance in future years and for future updates of the Element.

## SUMMARY OF ISSUES

The planned transportation system for Calimesa must be adequate to handle future forecast travel demand. Travel demand on the system includes trips to and from all existing and future land uses within the City, as well as from land uses outside the City. It is important to account for all potential sources of future trip-making when developing the Circulation Plan. Some of the major issues of importance to the City with respect to the future transportation system include:

- Arterial Highway System: The arterial highway system of Calimesa must have sufficient capacity to serve the expected number of trips to be generated by future growth. At the same time, it is important not to "overdesign" the system with excessive roadway widths and rights of way which will interfere with the character of the City. Proper design considerations must be followed when designing street segments and intersections.
- Freeway Operations and Access: I-10 is a major transportation facility within the City. It serves thousands of commuters each day who do not live in Calimesa, but it will also become an increasingly important link to the region for City residents and businesses as the City grows. Critical issues include operational conditions on the freeway itself, as well as traffic conditions on City controlled arterials which connect to the freeway. Without proper planning of both the freeway and the arterial connections, congestion on ramps leading to and from the freeway could result.

The operating conditions on the freeway itself will also be a major issue in the City in the future. If freeway operating conditions deteriorate too much, there will be increased incentives for motorists to use Calimesa streets as a freeway by pass. The best way to avoid this problem is to ensure that the freeway operates at acceptable levels. Otherwise, measures would be required which would discourage use of City streets by commuters. Such measures, unfortunately, have mixed effectiveness and also impact the ability of residents to use the local street system.

- Alternative Transportation Modes: Although the existing population and employment levels in Calimesa are not high enough to warrant fixed route transit services, such services will become more important as the City grows. This is especially true given recent regional mandates which require that transportation planning throughout Southern California must not simply accommodate new vehicle trips but must also shift demand for trips to modes other than single occupant automobiles. Calimesa should work with regional transit providers to ensure that a fair share of transit



programming is oriented toward the City as the need for commuter and local transit services increases.

## **GOALS AND POLICIES**

In keeping with its rural atmosphere and large undeveloped areas, traffic volumes in the City of Calimesa are generally low. Vehicular traffic is concentrated mainly along the City's commercial corridor and major streets. Future development is expected to lead to increases in traffic volumes on major roadways, as well as a need for new or improved streets in the outlying areas. The Transportation Element contains goals and policies promoting an efficient circulation system and a plan for improving the existing roadway network to handle traffic increases due to both regional and local growth. Other issues addressed in the Element include equestrian trails and bikeways, public transportation systems, truck routes, and trip reduction programs.

### **Transportation System**

**GOAL 1:** Provide a balanced transportation system that ensures the safe and efficient movement of people and goods throughout the City, while minimizing the use of land for transportation facilities.

- Policy 1.1** Provide a plan for a coordinated street system for the safe and efficient movement of people and goods.
- Policy 1.2** Continuously maintain and rehabilitate roadways to preserve an adequate quality of City streets and thoroughfares.
- Policy 1.3** Design each arterial road with sufficient roadway width to accommodate projected traffic at acceptable service levels, as based on the intensity or density of planned land uses.
- Policy 1.4** Arterial roads should carry both local and through traffic and be improved to maintain a Level of Service "C" or better.
- Policy 1.5** Require the dedication and improvement of arterial roadways prior to the issuance of certificates of occupancy.
- Policy 1.6** Work closely with Caltrans to implement freeway ramp/arterial roadway interchange improvements that promote the efficient flow of vehicular traffic to and from the City while minimizing potential impacts to City residents.
- Policy 1.7** Develop a transportation plan and program which is financially, technically, and legally implementable, both at the local and regional level.

- Policy 1.8** Encourage citizen participation in all aspects of transportation planning and its development process.
- Policy 1.9** Develop and implement transportation programs which maximize the use of funding from local, state and federal funds.

### **Transportation Planning**

**GOAL 2:** Develop a transportation system integrated with land use planning and responsive to the needs of the community.

- Policy 2.1** Design transportation improvements which are compatible with the natural environment. Xeriscape and drought tolerant landscaping techniques should be used for all parkway and median plantings. Reclaimed water should be used for irrigation purposes.
- Policy 2.2** Maintain a transportation system which promotes access and mobility between residential neighborhoods, employment centers, shopping, and health services.
- Policy 2.3** Minimize through traffic in residential neighborhoods.
- Policy 2.4** Seek to design a system of city arterials developed and connected to arterials in adjacent cities, in order to restrict and to discourage non-local traffic on Calimesa's local streets.
- Policy 2.5** All streets shall be constructed in accordance with City's standard street classifications. Deviations from standard street classifications may be allowed on a limited basis to preserve important and major structures which are located within the street right-of-way.
- Policy 2.6** Coordinate the planning for Calimesa's transportation needs with adjacent jurisdictions, public transit systems and regional highway facilities.

### **Public Transit**

**GOAL 3:** Seek to provide public transit services which promote the mobility of Calimesa residents and provide a reasonable alternative to the personal automobile.

- Policy 3.1** Transit funds should be used to improve Dial-A-Ride response time within existing service territories.

**Policy 3.2** Seek to extend the Dial-A-Ride service territory to outlying areas of the Calimesa City, as development occurs.

**Policy 3.3** Require the installation of bus improvements such as bus turnouts, bus stops, and terminals as part of the conditions of development for commercial and industrial, where appropriate.

## **Truck Routes**

**GOAL 4:** Regulate the travel of trucks on City streets.

**Policy 4.1** Establish a truck route system which designates truck and commercial vehicle routes and provides adequately sized and designed roadways to meet the needs of trucks and commercial vehicles. This will eliminate truck and commercial vehicle traffic through inappropriate areas of the City (such as residential neighborhoods).

**Policy 4.2** Clearly sign designated truck routes and identify maximum weight limitations on these routes.

## **Trip Reduction/Travel Demand Management**

**GOAL 5:** Develop measures which will reduce the number of vehicle-miles travelled during peak travel periods.

**Policy 5.1** Provide incentives to employers who encourage carpooling and vanpooling for employees.

**Policy 5.2** Provide preferential parking for carpools and vanpools, where appropriate.

**Policy 5.3** Promote mass transit by requiring dedication of access routes, stations, and stops, as part of new development.

**Policy 5.4** Develop a citywide transportation management program to apply to new developments and existing businesses, as appropriate.

## **Parking**

**GOAL 6:** Require adequate on-site parking to prevent spillover on the adjacent street system.

**Policy 6.1** Provide for adequate parking facilities for all uses.



- Policy 6.2** Seek to provide additional off-street parking in areas that have been identified as deficient.
- Policy 6.3** Consider allowing reduced parking standards for mixed use projects where shared parking is likely to occur. Reduced parking requirements should be granted only with the appropriate documentation based on standard, recognized methodologies such as the Urban Land Institute (ULI) research.

## **Trails and Bikeways**

- GOAL 7:** Plan for and seek to establish an area-wide system of equestrian, hiking and bicycling trails, with linkages to parks and the trail systems of adjacent jurisdictions.
- Policy 7.1** Plan for the location of equestrian, pedestrian, and hiking trails.
- Policy 7.2** Plan for bikeways which provide bike paths and bike lanes to parks, schools, public facilities, and employment centers.
- Policy 7.3** Encourage the use of existing easements and rights-of-way, especially floodway and utility corridors, as the principal trail and bikeway locations.
- Policy 7.4** Establish an implementation program, including funding, for the trails/bikeways system (e.g., dedication or acquisition of trail easements or fee ownership).
- Policy 7.5** Require the development and dedication of trails in conjunction with proposed development.
- Policy 7.6** Define measures to ensure that trails are established, maintained and used in the safest manner possible.
- Policy 7.7** Encourage the utilization of trails/bikeways for commuting, as well as recreational purposes.
- Policy 7.8** Provide adequate right-of-way and improvements for bike lanes in accordance with the Circulation Plan.
- Policy 7.9** Encourage pedestrian movement by providing pedestrian facilities that are direct and convenient, particularly in the existing commercial districts and all new commercial developments.

- Policy 7.10** Require sidewalks on both side of all streets in areas with the Residential Low, Medium, High, Commercial, and Industrial designations. The City encourages alternate designs including parkways and meandering and enhanced paving.

### **Arterial Access**

**GOAL 8:** Establish vehicular access control policies in order to maintain and insure the effectiveness and capacity of arterials.

- Policy 8.1** To the extent possible, access shall be provided on local or collector streets where frontage is available on both local and arterial streets.
- Policy 8.2** Access to an arterial road shall be limited to one point for every 300 feet of frontage or one point for parcels with less than 300 feet of frontage.
- Policy 8.3** Combined and/or reciprocal access onto arterials shall be required between adjacent properties, wherever possible, to reduce vehicular access point and increase roadway efficiency.
- Policy 8.4** For corner lots, whenever possible, vehicular access points on arterial roadways shall be located a minimum of 300 feet from the centerline of the intersection.
- Policy 8.5** In order to minimize left-turn movements, vehicular access shall be located opposite an existing or planned access across the street, to the extent possible.

### **Disabled Access**

**GOAL 9:** Promote mobility for the disabled, in accordance with state and federal law.

- Policy 9.1** Require that all development comply with the requirements of the state and federal law for the disabled. Requirements may include ramps at street corners, access to public buildings, traffic signal timing and the like.

## **TRANSPORTATION ELEMENT TECHNICAL ANALYSIS**

### **Travel Demand Modeling**

Circulation element studies throughout California take many different forms depending upon the characteristics of the City. For Calimesa, it is important to forecast the considerable traffic growth that is expected in the future due to development on vacant land. The interaction of trips to and from Calimesa with the rest of the region, as well as future growth in non-local "through" traffic (i.e., traffic passing entirely through the City without stopping) are both important. Because of these

factors, it was determined that the use of a computerized travel demand model which covers the City and areas outside the City would be most appropriate to forecast changes in the Calimesa circulation system. Use of a modeling tool limited only to the City, as is sometimes done, would not accurately capture the trips destined to and from Calimesa from other parts of the region.

The Southern California Association of Governments (SCAG) updated the RIVSAN travel demand model in 1992 (RIVSAN is an acronym for Riverside San Bernardino). That model covers all of Riverside and San Bernardino Counties, is based upon SCAG's regional model which covers all of Southern California, and is used to help develop the regional transportation plan. The RIVSAN model was chosen as the most appropriate tool to use for the purposes of forecasting future traffic volumes on Calimesa streets for the following key reasons:

- RIVSAN is the most up-to-date model available which covers the City.
- RIVSAN covers not only Calimesa but includes all surrounding communities and can most accurately capture trips destined outside of the City.
- RIVSAN is the official regional model which is used to help make transportation policy decisions by the regional planning agency.
- RIVSAN is the most cost effective tool to use since it is already fully developed, therefore, there was no duplication of effort, such as there would be if the City created its own model.
- RIVSAN is the model preferred by the Riverside County Transportation Commission (RCTC) for use in the Congestion Management Program (CMP) process. Even though Calimesa currently does not have any designated principal arterials within its boundaries which are part of the CMP network (except for I-10 which is monitored by RCTC and Caltrans), the City is still subject to certain CMP requirements. Also, the CMP network may be expanded in the future to include routes in Calimesa, therefore, it is advantageous to the City to provide modeling data based on the preferred CMP model.

The RIVSAN model is designed as a tool for regional and County level transportation analysis. Use of RIVSAN on a local level requires that the model be modified and enhanced to provide more accurate local traffic forecasts. Certain model refinements were made to RIVSAN to provide the information required for the Calimesa General Plan including the following:

- Zone System - The transportation modeling area is divided into a series of Traffic Analysis Zones (TAZs) for purposes of representing the amount of land use and socioeconomic activity throughout the area. Because the regional model covers a very large area, the zone system is less refined than is required for City level analysis. The



RIVSAN model has a total of four zones within the Calimesa area out of a total of over 700 zones throughout the region. To obtain the level of detail and accuracy needed for the General Plan, Meyer, Mohaddes Associates refined the zone system to include a total of 28 zones in the City. The new zones are much smaller than the old zones and therefore provide much greater detail in terms of local land use identification.

- Highway Network - Similar to the discussion of the zone system above, the RIVSAN model highway network is less detailed for regional analysis than is required for local General Plan level analysis. This is especially true for the future when there will be new roadways and expanded roadways. Therefore, the highway network in the model was reviewed and refined for purposes of conducting the General Plan analysis. Representative new roadway links were included in the Oak Valley Specific Plan area based on the traffic study prepared for that project. It is recognized that the ultimate alignment of those roadways may differ somewhat from those shown in the Oak Valley study. However, the level of detail was sufficient for purposes of forecasting overall citywide traffic patterns.
- Socioeconomic/Land Use Data - The RIVSAN model trip generation component is based on socioeconomic data such as population, employment, income and auto ownership. The information in RIVSAN is based upon adopted regional databases as compiled by SCAG with input from cities. This data was reviewed by Meyer, Mohaddes Associates for years 1990 and 2010 and compared to the land use forecasts developed for the current General Plan. Because significant differences were found, the SCAG data was modified to reflect the General Plan forecasts. Both the General Plan scenario as well as the Low Density Alternative were evaluated using the model.

Because the model is socioeconomic data driven, it was necessary to convert land use data developed by David Evans and Associates to socioeconomic data. The conversion was accomplished using a series of conversion factors developed by SCAG specifically for purposes of transportation modeling in Riverside and San Bernardino Counties.

## Existing and Future Trip Generation

The RIVSAN model estimates trip generation within Calimesa for both the existing (1990) and future (Land Use Plan buildout) scenarios. As explained above, the trip generation forecasts are based on socioeconomic data developed by SCAG and subsequently updated for the General Plan by David Evans and Associates. The level of land use intensities are described in detail in the Land Use Element and associated trip generation estimates are discussed in this section.

RIVSAN uses the concept of trip ends which are called trip "productions" and trip "attractions" to describe trip generation. Each trip has both a trip production as well as a trip attraction. For example, a morning trip from home to work has two "ends." The home end of the trip (i.e. when you pull out of your driveway) is a trip production, while the work end of the trip (i.e. when you pull into the driveway at work) is a trip attraction. Therefore, the actual number of trips in any area is equal to one half of the total productions and attractions.

Using this concept, RIVSAN is able to replicate all future trips in Calimesa and the rest of the modeling area (greater Southern California region). Table 2-1 displays the trip productions and attractions as estimated in the RIVSAN model for both 1990 and upon General Plan buildout.

TABLE 2-1 FORECAST TRIP PRODUCTIONS AND ATTRIBUTIONS						
Year	Home to Work		Other to Work		Home to Other	
	Production	Attraction	Production	Attraction	Production	Attraction
1990	1,040	830	4,210	1,600	10,550	8,320
2010	<u>14,540</u>	<u>21,760</u>	<u>27,290</u>	<u>25,180</u>	<u>93,990</u>	<u>63,410</u>
Change	13,500	20,930	23,080	23,580	82,540	55,090
Year	Other to Other		Home to Shop		Total	
	Production	Attraction	Production	Attraction	Production	Attraction
1990	4,680	4,170	3,430	2,030	23,910	16,950
2010	<u>55,050</u>	<u>70,680</u>	<u>46,550</u>	<u>20,900</u>	<u>221,980</u>	<u>201,930</u>
Change	50,370	66,510	43,120	18,870	198,070	184,980
Source: Meyer, Mohaddes Associates, 1993.						

The data in the table indicates that a substantial increase in trip generation in the City of Calimesa is forecast over the life of the General Plan. The number of trip productions and attractions is forecast to increase from approximately 40,800 trips today to approximately 423,900 trips after buildout of the General Plan. The number of actual trips (one half of the number of productions and attractions) is expected to increase by approximately 191,500 trips by the time of Plan buildout. This represents an approximately ten-fold increase in trips to and from Calimesa due to growth within the City and in surrounding communities.

After zonal, network, socioeconomic/land use and trip generation refinements were completed, the model was run to determine forecast traffic volumes on Calimesa streets and the I-10 freeway in 2010. Forecast ADT values are used to determine the appropriate facility classification type and number of lanes for each street, as described in the following sections.

## ROADWAY FUNCTIONAL CLASSIFICATIONS

One of the principal elements of any Transportation Element is the definition of the City's roadway system in terms of designated functions. For example, local residential streets are designed to serve only short distance local trips, while arterial roadways are designed to serve longer distance trips and higher traffic volumes. The "functional classification system" defines each roadway in the City and provides guidelines for the level and type of traffic based on the type of roadway. The classification system also establishes the roadway curb-to-curb widths of each type of facility, as well as the amount of right-of-way to be preserved as development occurs adjacent to roadways. The City currently has no adopted functional classification system, therefore, one of the major purposes of the Transportation Element is to establish the City's roadway network definitions.

### County of Riverside

Prior to incorporation, the County of Riverside's functional classification system was the only guide. The County of Riverside system includes seven types of roadways (in addition to freeways), as follows:

- **Urban Arterial** - 134-foot right-of-way
- **Mountain Arterial** - 110-foot right-of-way
- **Arterial** - 110-foot right-of-way
- **Major** - 100-foot right-of-way
- **Secondary** - 88-foot right-of-way
- **Expressway** - variable right-of-way
- **Specific Plan Road** - variable right-of-way

The existing County General Plan was adopted in March 1984 by the Board of Supervisors. Within Calimesa, it includes only four of the seven functional classifications (Major, Secondary, Arterial and Specific Plan Road). Exhibit 2-1 illustrates the existing County General Plan classification designations. The system as outlined in the County's General Plan does not cover all of the key roadway segments in the City and is insufficient for long term transportation planning and programming in Calimesa.

The functional classification of each street is determined based on several key factors including the following:

- Future Traffic Volumes - The classification of each roadway should be designated so that the roadway capacity, once it is fully built out, will support the anticipated traffic volumes at an acceptable level of service (LOS) once the city's developable parcels are also fully built out. Level of service is a qualitative measure describing operational conditions of a traffic stream or intersection. It is usually based on a numerical calculation of the volume to capacity ratio (V/C) of the transportation

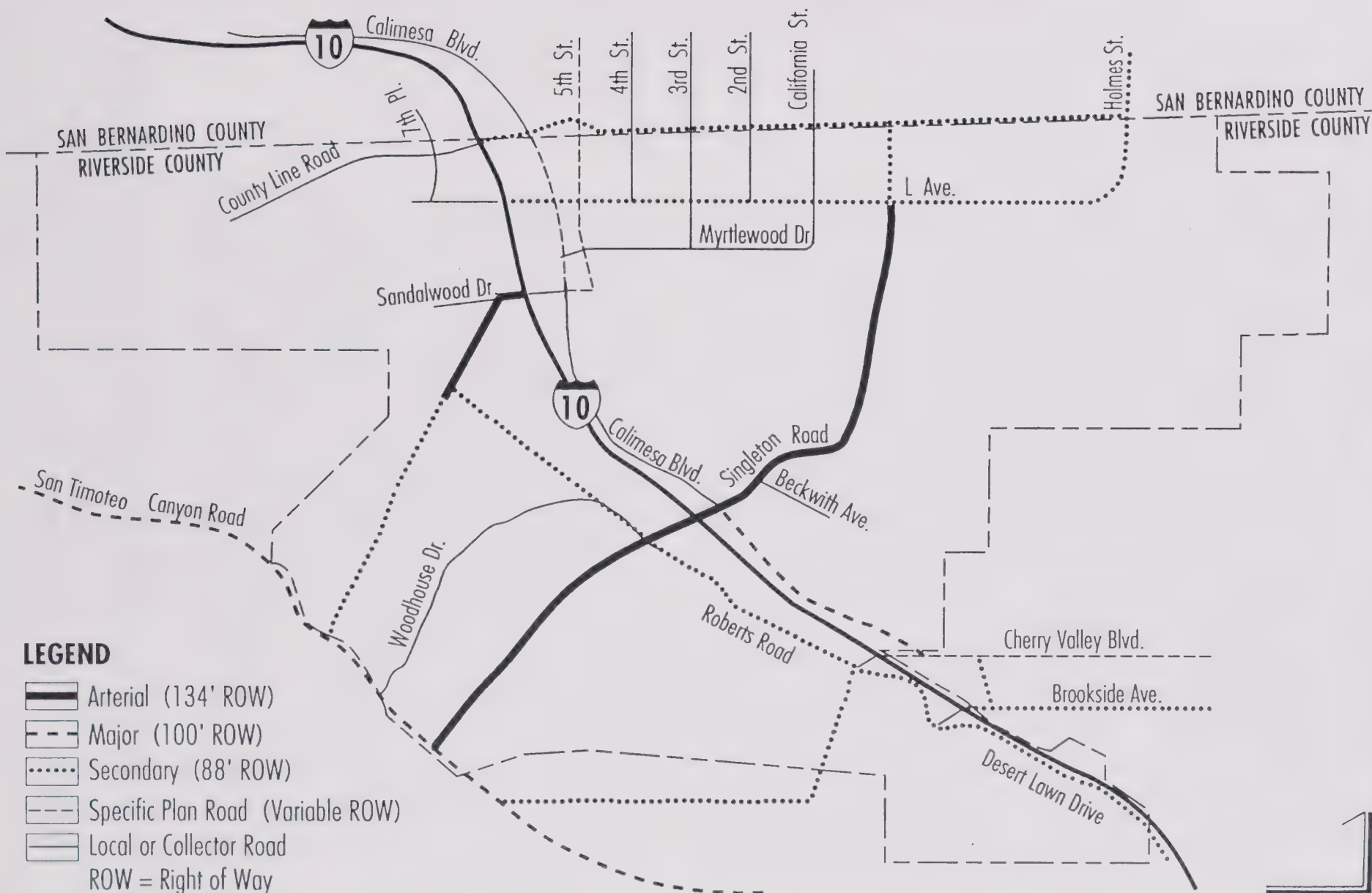


facility being measured. Service levels range from A to F, with A representing excellent operating conditions and free flow, while F represents extreme congestion and significant motorist delay. The definition of acceptable level of service is determined by the City as part of the development of General Plan through the goals and policies.

Many studies have been completed on the appropriate levels of traffic on various types of facilities. Table 2-2 displays general guidelines that are used to categorize roadways into logical functional classifications. A level of service C is the minimum acceptable level of service in Calimesa.

- Adjacent Land Uses - Another important element in setting roadway functional classifications is adjacent land uses. Each classification is specified to carry certain types of traffic. For example, freeways are designed to carry relatively large volumes of long distance "through" traffic, while local streets represent the opposite end of the spectrum and are designed to carry only traffic destined for land uses along the street. Arterial and collector streets are designated to carry varying levels of local and through traffic.

TABLE 2-2 TRAFFIC VOLUME GUIDELINES				
Roadway Facility	No. of Lanes	Maximum Daily Volume		
		LOS C	LOS D	LOS E
Major Arterial	4U	28,000	30,000	32,000
	4D	29,500	31,700	33,400
	6U	42,800	45,500	47,800
	6D	45,000	47,900	50,300
Secondary Arterial	2U	13,500	14,800	15,700
	4U	22,400	24,000	25,600
	4D	23,600	25,400	26,700
Collector Street	2U	7,700	11,600	12,900
Local Street	2U	varies but generally less than 2,500	varies but generally less than 2,500	varies but generally less than 2,500
U- undivided roadway D - divided roadway Source: Meyer, Mohaddes Associates, 1993.				



SOURCE: Meyer, Mohaddes Associates, Inc.

DEA DAVID EVANS AND ASSOCIATES, INC.

# EXHIBIT 2-1 COUNTY OF RIVERSIDE ROADWAY FUNCTIONAL CLASSIFICATIONS





## Classification System Recommendations

The County of Riverside functional classification system for City roadways is inadequate to provide the proper guidance as Calimesa grows. As part of the development of the City's General Plan, a new system is provided in this Element which simplifies the County's system and covers all of the key roadways in the City. The following functional classification system categories are discussed below, with typical cross sections provided in Exhibit 2-2:

- **Major Arterials** - These roadways would provide an 84-foot roadway within a 100-foot right-of-way upon full buildout. This is sufficient width to provide three lanes in each direction (plus a center left turn lane) without curbside parking, or two lanes in each direction (plus a center left turn lane) with curbside parking.

Major arterials would serve as the main "backbone" roadways in the City, would provide access to the freeway and would serve a mixture of local and through traffic. Major arterials would be eligible for various traffic engineering measures that would enhance traffic flow for purposes of drawing traffic away from local residential streets. Parking may or may not be provided along fully built out arterials depending on adjacent land uses and priorities of traffic flow versus parking availability. Major arterials are typically spaced at one mile intervals. This major arterial classification compares to the County's "Major" classification which includes 100 feet of right-of-way with 76 feet of curb to curb width. The reason for the proposed modification from the County standard is to allow for six through lanes plus a center left turn lane, which is not possible with the County's 76-foot roadway standard for major arterials.

- **Secondary Arterials** - These roadways would provide a 64-foot roadway within an 80-foot right-of-way. This is sufficient width to provide two through lanes in each direction (plus a center left turn lane) without parking, or one lane in each direction (plus a center left turn lane) with parking. Secondary arterials would function in a similar manner to major arterials except that secondary arterials carry less total traffic, less non-local through traffic and a relatively greater proportion of local traffic. Secondary arterials are typically spaced at half mile intervals between major arterials, or, where appropriate, depending on geographic and land use conditions. This classification is closest to the County's "Secondary" classification, although the County specifies an 88-foot right-of-way. An 80-foot right-of-way is suggested in Calimesa due to the small town atmosphere of Calimesa and desire to maintain related qualities of life.
- **Collector Streets** - These streets would provide a 44-foot roadway within a 66-foot right-of-way. This is sufficient to provide one lane in each direction with parking. Collector streets function as feeder routes to carry traffic from the arterial system to

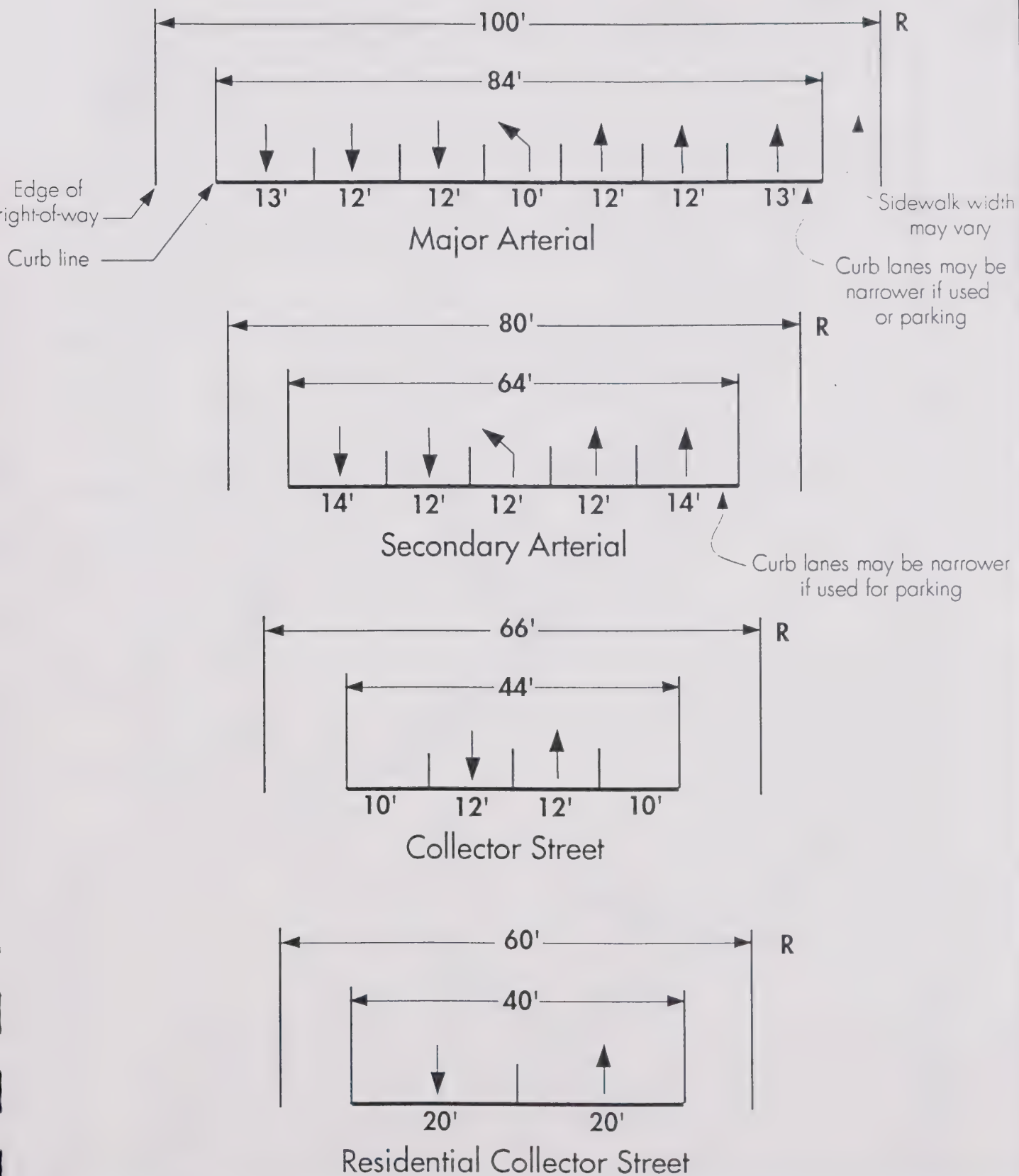
the local system, but should carry only very minimal levels of non-local through traffic.

- **Residential Collectors** - These roadways would provide a 40-foot roadway within a 60-foot right-of-way. This functional classification is similar to a local street classification, although it would generally have less fronting land uses than a purely local street and would also function as a connection for a limited number of local trips to the arterial system.
- **Specific Plan Streets** - These are defined as streets in an area to be covered in the future by a specific plan. The exact alignment, width and right-of-way of specific plan streets are not specified at this time, but will be determined based upon more detailed studies of proposed land use patterns and anticipated traffic volumes once the development plans are more fully described. It is possible, based on the level of traffic volume anticipated by more refined specific plans, that another arterial classification may be needed to accommodate forecast traffic flows in future specific plan areas. The County includes an "Arterial" classification at 110 feet of right-of-way and an "Urban Arterial" at 134 feet of right-of-way. Similar classifications are not proposed in Calimesa at this time due to the desire to maintain a rural/small town atmosphere. However, if future development patterns in specific plan areas warrant additional classifications, the City can designate such street sections as part of the specific plan or future General Plan updates.
- **Local Streets** - All streets not designated as one of the facility types above is a local street. Local streets function purely to provide direct access to abutting land uses and should not serve any through traffic. (a graphic displaying cross sections of each facility type will be provided following review and comment on the proposed functional designations).

The forecast traffic volumes for each existing street segment and some potential future new segments (primarily in the Oak Valley Specific Plan area) have been reviewed and a recommendation has been made regarding the appropriate functional classification for each. Exhibit 2-3 illustrates the forecast year 2010 daily traffic volumes on key City of Calimesa roadways based on the results of the RIVSAN model.

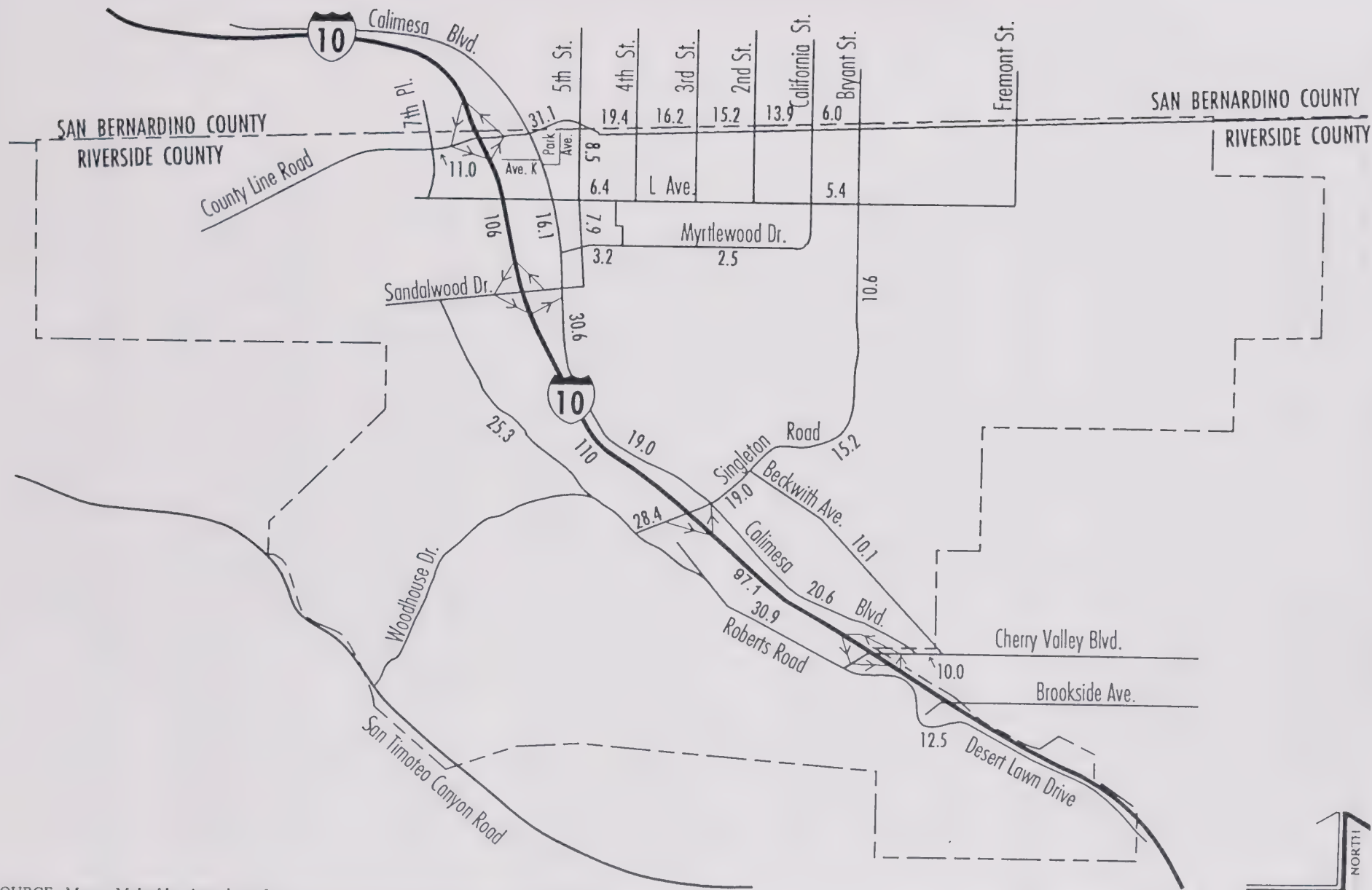
The modelling effort revealed I-10 freeway volumes in the City at year 2010 of approximately 110,000 vehicles per day and 8,250 vehicles per peak hour. This represents a doubling of volumes on the freeway over existing conditions (51,000 vehicles per day and 4,300 vehicles per peak hour).

The RIVSAN model 2010 roadway network includes a 6 to 8-lane freeway within the City. Using the standard freeway lane capacity from the Caltrans LARTS model of 1,750 vehicles per hour, the future level of traffic equates to volume/capacity ratios on the I-10 ranging from 0.59 at the 8-lane









SOURCE: Meyer, Mohaddes Associates, Inc.

DEM DAVID EVANS AND ASSOCIATES, INC.

EXHIBIT 2-3  
FORECAST 2010 DAILY VOLUMES  
FROM RIVSAN





segment to 0.79 at the 6-lane segment. This is equivalent to an LOS B to C/D in 2010. The RIVSAN model forecasts indicate similar levels of service on the freeway within the City, with a worst case LOS of D.

The functional classification recommendations have been developed based on the modeled volumes and building upon the County of Riverside classifications system for the City. The recommended classifications are similar the County's where appropriate. Where the General Plan analysis indicates a significantly different traffic volume than could be accommodated by the County's classification, the recommended classification is amended from the County Plan.

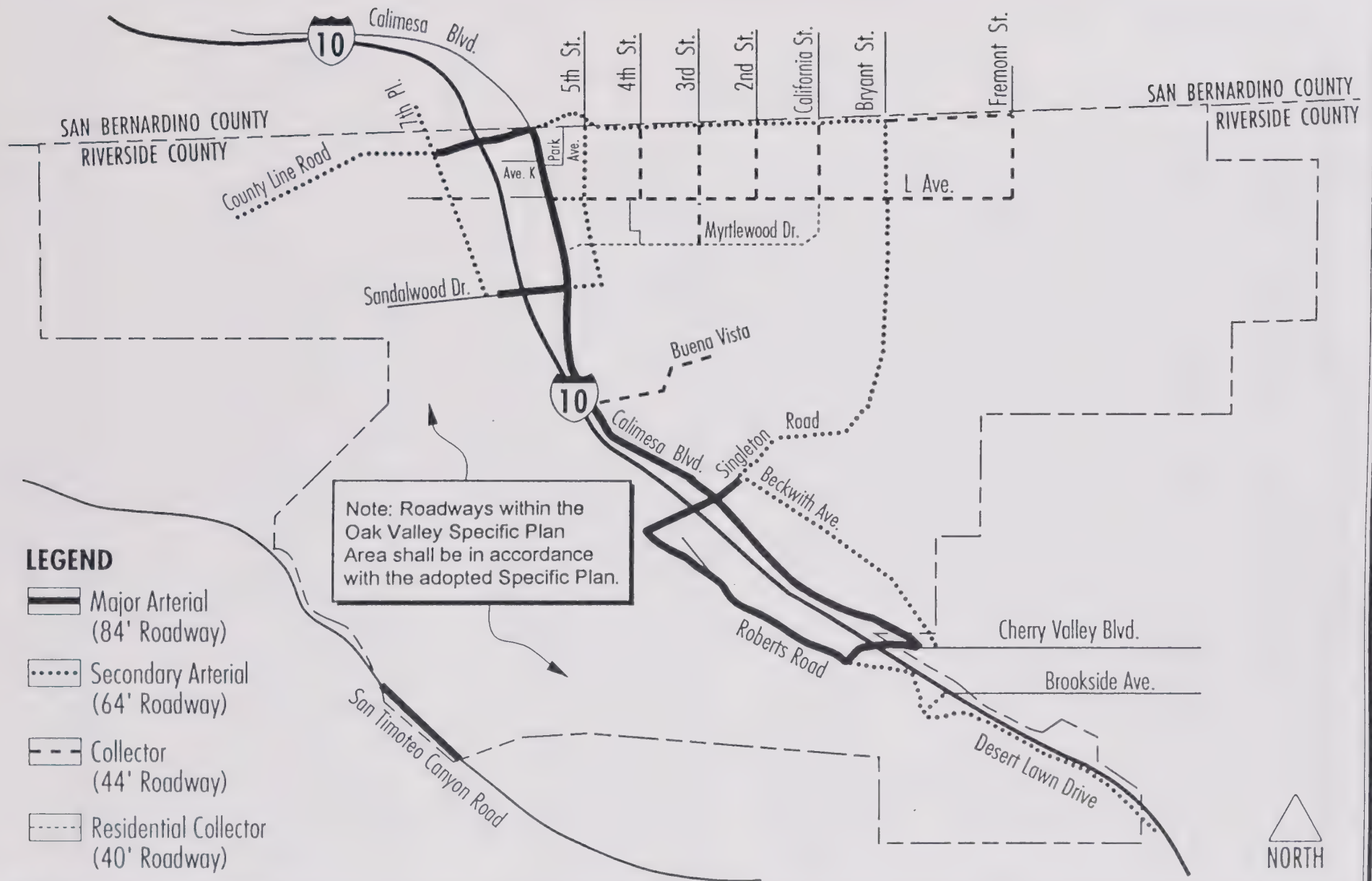
The facility type classification for the Calimesa roadway system are illustrated in Exhibit 2-4 and the recommendations for each key street are described below.

- **Calimesa Boulevard** - Calimesa Boulevard is designated as a Major Arterial by the County between Singleton and Cherry Valley and as a local street elsewhere. The General Plan analysis indicates that designation as a local street is not adequate. Calimesa Boulevard is therefore recommended for designation as a Major Arterial from the northern City boundary to Cherry Valley Boulevard. Calimesa Boulevard is an important roadway in the City since it serves as the main access route to the freeway throughout the City and is the main north/south route in the southern portion of the City.
- **County Line Road** - County Line Road is designated as a Secondary Arterial by the County from the freeway to Holmes Street. The General Plan analysis indicates that this is an appropriate designation except at the freeway where additional capacity may be needed. Therefore, County Line Road is designated as a Major Arterial in the vicinity of the freeway from 7th Place across the freeway to Calimesa Boulevard, and as a Secondary Arterial from Calimesa Boulevard to Bryant Street, in conjunction with the City of Yucaipa. Designation as an arterial beyond Bryant Street is not anticipated to be necessary at this time.
- **Avenue L** - Avenue L is designated as a Secondary Arterial by the County from the freeway to Holmes Street. This designation is considered appropriate for the portion of Avenue L west of 5th Street, while the portion east of 5th Street is recommended for Collector Street status based on the General Plan analysis.
- **Roberts Road/Desert Lawn Drive** - These streets are designated by the County as secondary roadways. The General Plan analysis indicates that a Secondary Arterial classification is appropriate at the southern end of the City, but a Major Arterial designation is warranted between Singleton Road and Cherry Valley Boulevard. The ultimate configuration of Roberts Road in this vicinity will depend to a large extent on more refined development plans for the Oak Valley Specific Plan area.

- **Singleton Road** - Singleton Road is designated by the County as an Arterial from San Timoteo Canyon Road to Avenue L/Bryant Street (currently unpaved /unconstructed portions). The General Plan analysis, as well as standard transportation planning guidelines, indicates that Singleton Road should be designated as a Major Arterial roadway from Roberts Road to Beckwith Avenue and as a Secondary Arterial from Beckwith Avenue to Avenue L/Bryant Street. Along with Calimesa Boulevard, this alignment of Singleton Road would provide the City with a north/south arterial system spaced at roughly one to two miles. Please note that the arterial designation as proposed in this Element provides for only 100 feet of right-of-way as opposed to the 110-foot county standard (in keeping with the desired rural characteristics of the City as explained above).

There has been some discussion of not connecting Singleton Road through the City as indicated on the County plan. Not providing the connection would shift the demand for local and intercity travel from Singleton Road to Calimesa Boulevard, which is the only parallel route. Some of the shifted traffic would also use the east/west connections of County Line Road, Avenue L and Myrtlewood Drive to access Calimesa Boulevard. The amount of traffic shifted would range from 10,000 to 15,000 vehicles per day. This would increase traffic volumes on Calimesa Boulevard in the mid-section of the City to over 40,000 vehicles per day, and would also increase volumes within the downtown area.

- **Sandalwood Drive** - The County classification for Sandalwood Drive is Arterial. Based on the General Plan analysis and the fact that Sandalwood provides freeway access, that classification is also recommended as part of the Transportation Element.
- **5th Street** - The County shows 5th Street as a Specific Plan roadway with an undesignated right-of-way. Based on the General Plan analysis, 5th Street is recommended for designation as a Secondary Arterial from Sandalwood Drive to County Line Road.
- **Myrtlewood Drive** - The County does not classify Myrtlewood Drive. Based on the General Plan analysis, it is recommended for designation as a Residential Collector street from Calimesa Boulevard to Avenue L.
- **Cherry Valley Boulevard** - The small portion of Cherry Valley Boulevard within the City is designated by the County as a Specific Plan roadway. Based on its use for freeway access and its forecast traffic volumes, Cherry Valley Boulevard within the City (at the freeway) is designated as a Major Arterial.
- **Beckwith Avenue** - Beckwith Avenue is not designated by the County, however, based on its function as an alternate north/south route to Calimesa Boulevard and its



SOURCE: Meyer, Mohaddes Associates, Inc.

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forecast traffic volumes, Beckwith is designated as a Secondary Arterial from Singleton Road to Cherry Valley Boulevard.

- **2nd, 3rd and 4th Streets** - These streets are not designated in the County's plan. They are recommended for Collector Street status based on their main function of connecting Avenue L and County Line Road and the infill development that is expected in the vicinity.
- **7th Place/7th Street** - With the proposed realignment and new commercial/ industrial land uses along these streets, they will become more important links in the overall circulation system of Calimesa. It is proposed that the realigned segment of roadway from County Line Road to Sandalwood Drive be designated as a Secondary Arterial. This will also provide additional capacity to link the two freeway ramp locations on the west side of I-10.
- **Oak Valley Specific Plan Area** - It is not possible to accurately define the street system in this area at this time because of the variability in the potential type and location of development. The street system must be designed to ultimately serve the specific plan area, as well as to prevent impacts on other portions of the City once the land uses are fully built out.

As part of the RIVSAN modeling analysis, the potential magnitude of added east/west and north/south trip-making in the specific plan area was identified. Based on the modeling results, the capacity requirements for the area will include a series of east/west oriented secondary arterials, as well as a collector street system. At least one major arterial for east/west traffic may be required depending on the ultimate land use design. North/south traffic flow will require that Roberts Road be implemented to full Major Arterial standards and be supplemented by another north/south oriented Secondary Arterial to be located to the west.

## **INTERSECTION DESIGN STANDARDS**

In general, the greatest capacity constraints in a highway system occur at signalized intersections. This is because the available capacity must be shared by two arterials. Therefore, it is sometimes desirable to provide additional capacity at intersection locations relative to mid-block segments. The additional capacity is provided in the form of additional lanes of traffic. The additional lanes usually serve traffic turning from one arterial to another, but additional through lanes can also be provided. The additional lanes generally extend from the intersection for approximately 300 feet, but shorter or longer distances can be provided depending on the particular conditions at each location.

The additional lanes usually consist of either one exclusive right turn lane where right turn volumes are expected to be relatively large or dual left turn lanes where left turn volumes are expected to be relatively large. The forecast volumes in Calimesa do not indicate the need for many locations with additional intersection capacity in this form with a few exceptions. The following intersections are identified as potential locations for long term capacity enhancements beyond the mid-block design standards described above:

- Singleton Road/Calimesa Boulevard
- Sandalwood Road/Calimesa Boulevard
- County Line Road/Calimesa Boulevard
- Roberts Road/Singleton Road
- Future intersections within the Oak Valley Specific Plan area

The configuration of these intersections will be determined as part of more detailed future studies and as part of the normal project environmental review and traffic engineering functions of the City. At a minimum, it is recommended that the following design standards be maintained for all arterial intersections:

- Left turn lanes - 10 feet wide
- Through lanes not adjacent to curb - 11 or 12 feet wide
- Through lanes adjacent to curb - 12 or 13 feet wide
- Streets with striped bike lane (Class II facility) - add a minimum of five feet roadway width in each direction

## **PUBLIC TRANSPORTATION**

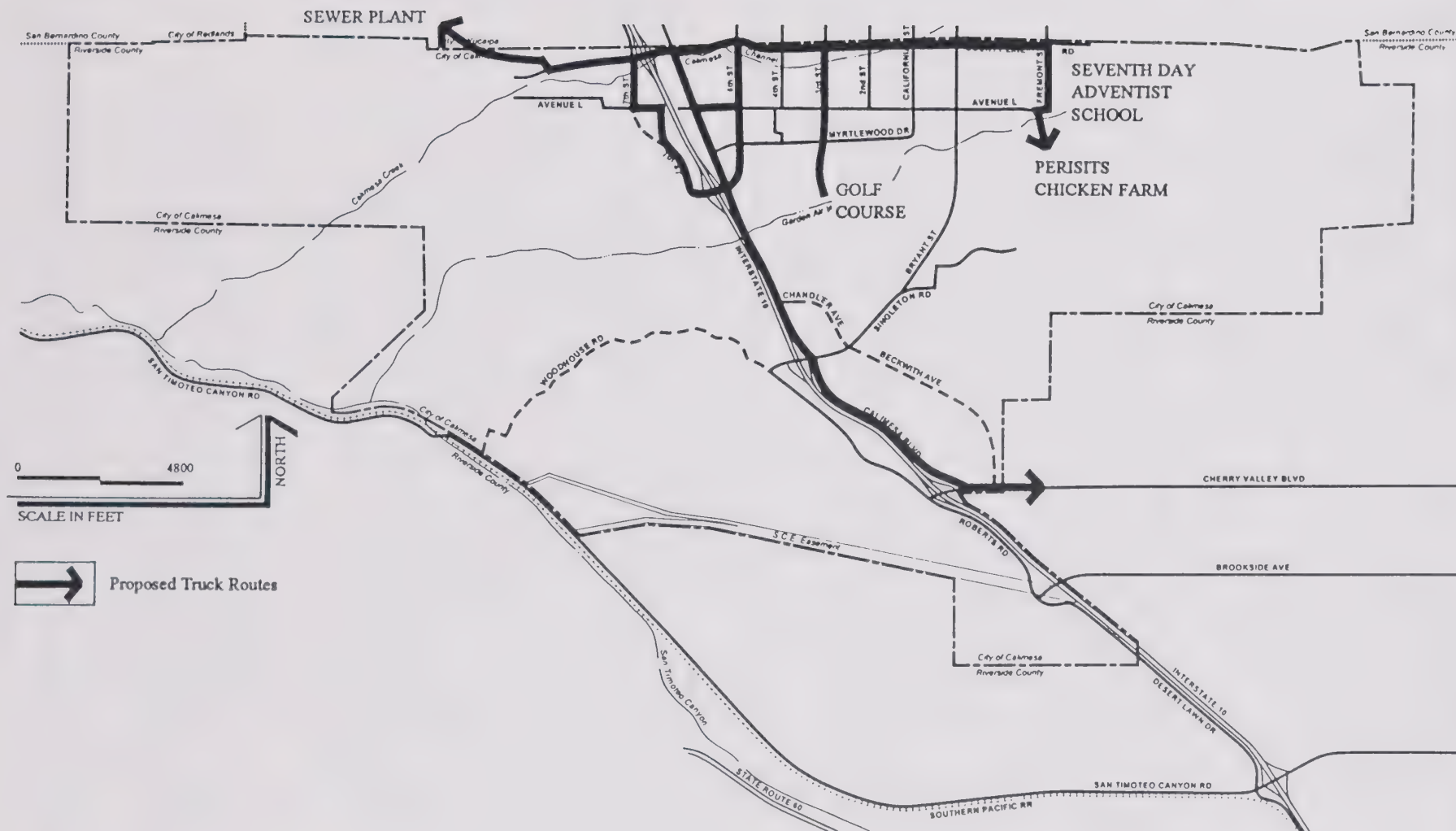
There are no regularly scheduled public transportation services in the City currently. Based on the General Plan forecast population and the forecast traffic volumes, public transit services will be warranted in the future. It is premature to describe the specific types of services or routes to be implemented in Calimesa in the future. It is appropriate, however, for the City to continue to monitor transit service planning and programming activities in the County and region to ensure that Calimesa receives its fair share of transit resources.

## **TRUCK ROUTE PLAN**

A truck route plan has been prepared by the City. The designated routes are shown in Exhibit 2-5. The proposed routes are all identified as collector street level or higher in the functional classification scheme. The routes are as follows:

- County Line Road
- Calimesa Boulevard
- 5th Street







- 7th Street/7th Place
- Cherry Valley Boulevard
- Fremont Street
- 3rd Street
- Avenue L from Calimesa Boulevard to 5th Street

## **TRANSPORTATION DEMAND MANAGEMENT**

The City adopted a Transportation Demand Management Ordinance in November 1992 based upon the sample ordinances in the Riverside County Congestion Management Program. As the City grows, enforcement of the provisions of the ordinance will become increasingly important for purposes of controlling traffic impacts. Calimesa has opportunities that many established cities do not have with respect to development and trip growth. All major new development projects should be carefully reviewed to ensure that they conform with the TDM ordinance and that they provide adequate rideshare related facilities. The City also should carefully review its parking code to ensure that developments are not asked to provide an over supply of parking, thereby contributing to the incentives already present to travel via single occupant automobiles. There is increasing discussion at the regional level for stricter mandates with respect to controlling locally generated travel demand. Therefore, it is important for the City to address its own anticipated growth in traffic to avoid regional or even state mandates to reduce trips in Calimesa.

## **RIVERSIDE COUNTY CONGESTION MANAGEMENT PROGRAM**

State legislation (AB 471 and AB 1791 amendments) require each metropolitan county in California, including Riverside, to designate a Congestion Management Agency (CMA) and to prepare a Congestion Management Program (CMP). The designated CMP agency for Riverside County is the Riverside County Transportation Commission (RCTC) and the first CMP for the County was adopted by the Commission in September 1991. The second CMP was adopted on December 10, 1992. The purpose of the CMP legislation is to more directly link land use, transportation and air quality decisions. It has established a number of new requirements for regional and local agencies. The CMP system includes all state highways and selected non state highway principal arterials. Cities with non state highway principal arterials on the system within their boundaries are required to participate in a number of monitoring and reporting tasks related to the CMP. All state highways are monitored by RCTC. Since Calimesa does not have any CMP non state highway routes, Calimesa has fewer CMP requirements than other cities. There are still, however, CMP requirements that Calimesa must meet, including:

- Coordinate with other jurisdictions regarding impacts of growth within Calimesa on their CMP system roadways. This may include using a model (RIVSAN or other model as long as it is based on RIVSAN) to determine impacts of Calimesa growth on local jurisdictions. This requirement has not been fully developed in terms of more specific obligations of the cities without CMP links, therefore, no specific actions on



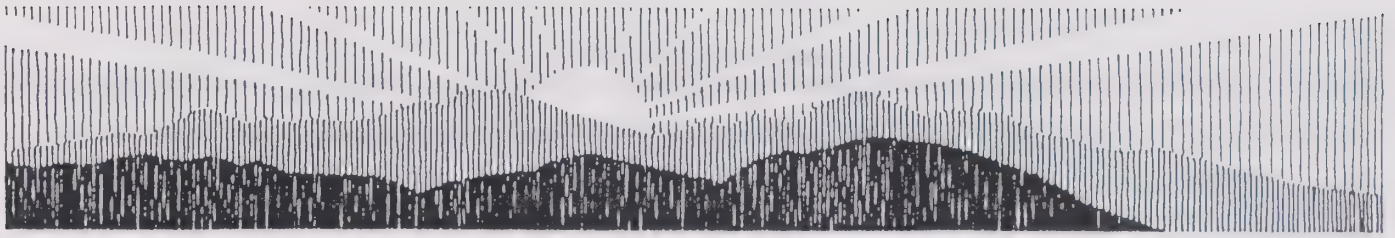
the part of Calimesa is required at this time. The City should continue to monitor CMP guidelines from RCTC and participate in regional forums regarding the Congestion Management Program.

- The City is required to adopt and implement a Transportation Demand Ordinance. The City adopted an ordinance November 1992 and therefore is already in compliance with this provision.
- The City must allow RCTC to review/analyze land use coordination records and other requirements, as necessary, to monitor the CMP implementation process.

## **HIGHWAY ACCESS MASTER PLAN**

The Calimesa Highway Access Master Plan Study Report was submitted to the City by Dokken Engineering in November 1992. That report outlines the improvements to three existing interchange access points at County Line Road, Sandalwood Drive and Singleton Road on Interstate 10. The primary purpose of the plan is to provide the City of Calimesa with conceptual configurations of long range highway access facilities needed to satisfy the City's growth plan. It is further stated that the plan should be incorporated into the General Plan Transportation Element. This section of the Transportation Element discusses that plan and how it relates to the overall circulation planning effort in the City.

The Highway Access Master Plan states that the effort was undertaken without reliable traffic forecast data, but that the conclusions of the study were not expected to change dramatically when forecast volumes became available. Meyer, Mohaddes Associates has reviewed the plan and find that the general configurations as proposed by Dokken will adequately handle forecast 2010 traffic volumes at each interchange. In general, the plan calls for four to six lane roadway cross sections at the freeway and leading to the interchanges. This amount of capacity will be required in addition to dual left turn movements at selected locations to and from freeway ramps. This is consistent with the Transportation Element calling for Major Arterial designations at all interchanges where surface streets meet and cross the freeway. The level of detail provided by the RIVSAN model is not sufficient to develop refined future intersection turning movement forecasts at this time as called for in the access master plan. That level of detail would be the next step in the process of refining the lane configurations at each interchange location.



## HOUSING ELEMENT

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### INTRODUCTION

The attainment of a decent home and a suitable living environment for every Californian is the State's major housing goal. To ensure that local jurisdictions recognize their responsibilities in achieving this goal, State law requires the preparation and regular update of Housing Elements. Guidelines for the preparation of Housing Elements have been established by the California Department of Housing and Community Development (HCD). These guidelines include issues that need to be addressed and programs for improving housing, providing adequate sites for housing, and meeting the housing needs of all segments of the community. To monitor compliance with these requirements and State housing policies, all housing elements are reviewed by HCD prior to and after their adoption.

The Housing Element of the Calimesa General Plan addresses the housing needs of the City. The primary focus of the Housing Element is to strive to meet State requirements by encouraging the provision of suitable housing and protecting the vitality of existing residential neighborhoods. The goals, policies and programs in this Element include measures to maintain and conserve the existing housing stock, to encourage the production of housing types to meet residents' needs, and to ensure the presence of adequate infrastructure and services. Through implementation of its housing programs, the City will be able to improve the living environment for all existing and future residents.

### Relationship to the General Plan

The Calimesa Housing Element fulfills the requirements of the State Planning and Zoning Law and the regulations of *Section 65580-65589.5 of the California Government Code*. State law is very specific on the content of the Housing Element and the requirement that the provision of adequate and affordable housing is the responsibility of all local governments. The requirements of State law are outlined in Table 3-1. The Calimesa Housing Element has been formulated to address these requirements, as well as the relevant housing needs of the City. The Element shall be submitted to HCD for review and comment, prior to its adoption as part of the General Plan.

The City's General Plan is being formulated with reviews and revisions to ensure consistency between the goals, policies and programs of the different elements. The EIR for the General Plan also provides a way of checking consistency by grouping the policies and programs by environmental issue. It is expected that internal consistency will be achieved prior to adoption of the plan.

**TABLE 3-1**  
**HOUSING ELEMENT REQUIREMENTS**

<b>California Government Code, Section 65583</b>	
(a)	Needs Assessment and Inventory of Constraints and Resources
(1)	Population and employment trends
(2)	Household and housing stock characteristics
(3)	Land inventory and analysis of infrastructure
(4)	Governmental constraints
(5)	Nongovernmental constraints
(6)	Special housing needs
	■ Female-headed households
	■ Overcrowding
	■ Farm workers
	■ Elderly
	■ Handicapped
	■ Homeless
(7)	Energy Conservation
(8)	Publicly Assisted Housing Developments
(b)	Statement of Goals, Quantified Objectives, and Policies
(c)	Five-Year Housing Program
(1)	Adequate sites
(2)	Assist development of affordable housing
(3)	Remove governmental constraints
(4)	Conserve existing housing stock
(5)	Promote equal access to housing
(6)	Preserve low income housing
(d)	Description of the Public Participation Program in the formulation of Housing Element goals, policies, and programs.
<b>California Government Code, Section 65584</b>	
(1)	A description of the Regional Housing Needs Assessment (RHNA) prepared by the Southern California Association of Governments.
<b>California Government Code, Section 65588</b>	
(a)	Review of Past Element
Source: State of California Office of Planning Research	

The housing needs of Calimesa residents may be identified through population and household characteristics, population and employment growth trends, and the analysis of groups which may have special housing needs. Housing resources include the City's housing stock characteristics, land available for residential development, and facilities that support existing residential communities. By matching the resources with housing needs, the City will be able to identify households or groups which do not have adequate housing; the affordability of the housing stock in relation to households income; the capacity of the City to accommodate future residents; and other housing concerns which need attention in its housing programs. The discussion of governmental, economic and physical



constraints to the development of housing and opportunities for energy conservation further expand on the factors that affect housing costs and production. The Housing Element for Calimesa has been designed to address the identified needs, with the available resources.

## **SUMMARY OF ISSUES**

Housing needs and concerns, as identified in the Housing Profile Report, show that Calimesa has housing needs that would benefit from local government assistance and resources. These include the need to rehabilitate the existing housing stock, the development of new housing to accommodate the future population and the provision of adequate housing for groups with special housing needs. Specifically, housing concerns in the City include:

- Population Growth: Calimesa had approximately 7,140 residents in January 1992 and 7,309 residents in January 1993. Population growth in the City was estimated at 2.5 percent from 1980 to 1990. This rate is not as rapid as the rest of Riverside County, but growth projections show that the City will have approximately 8,575 residents by the year 2000. Adequate housing is needed by the existing population, as well as the future residents of the City.
- Seniors: The majority of residents are white and aged 55 years and above, presenting a need for senior citizen services.
- Special Housing Groups: Persons with special housing needs include disabled individuals, farmworkers and the homeless. There are a number of disabled persons in Calimesa, including those with mobility and self-care limitations. Several farmworkers are employed in nurseries, stables, and agricultural and livestock operations. Only one homeless person has been identified and can be found on County Line Road. The City will need to find ways to assist these individuals in finding suitable housing.
- Household Types: Various household types present a need for appropriate housing. Calimesa has large households which live in overcrowded conditions. Larger units are needed for these households. Female-headed households, minority households, elderly households, and lower income households in the City also have special housing needs which may not be provided by conventional market-rate housing.
- Existing Neighborhoods: Existing residential neighborhoods in the City of Calimesa consist of older subdivisions and large lots developments, mobile home parks, and newer planned residential developments. Residential uses are also found near commercial and industrial uses. Infrastructure and services are available to existing development, although vacant areas in the outlying tracts are not served by infrastructure or public services.

- Housing Stock: Calimesa had a housing stock of 3,131 dwelling units in 1993, with a vacancy rate of 5.01 percent. Most of these units are single-family detached housing which are owner-occupied. Older units are found in the central City, with newer housing in outlying areas. The majority of the housing stock is in good condition. Approximately 112 units (3.6 percent) have been identified to need minor repair, 31 units need major repairs, and 3 units require replacement.
- Housing Costs: Housing prices and rents in the City are within moderate range and are lower than prices in the urban areas of Riverside and San Bernardino counties. Still, approximately 328 households in Calimesa are considered overpaying for their housing (paying 30 percent or more of gross income for housing). These households require less expensive housing or assistance payments to reduce their housing expenses.
- Vacant Land: The vast amount of vacant land in the City provides ample opportunity to develop housing to meet the needs of the existing and future residents of the City. Estimates show that the City can hold up to 15,533 dwelling units at buildout, under the Land Use Plan designations.
- Constraints to Housing Production: Governmental regulations which may indirectly affect housing costs and rents include land use controls, on and off site improvement standards, building codes and code enforcement, processing fees and exactions, and processing and permit procedures. Other constraints to affordable housing development include the availability of financing, price of land, construction costs, availability of infrastructure, and geologic constraints. The City will have to evaluate ways to help remove these constraints and encourage affordable housing development. It is expected that governmental constraints that are within the control of the City would be easier to remove, than economic or geologic constraints.

## **PUBLIC PARTICIPATION**

The City of Calimesa encourages public participation in all government programs. In 1991, the City undertook a community-wide survey to learn the needs and preferences of its residents. The responses to the survey are being used as part of the City's first General Plan. The Calimesa General Plan, together with this Housing Element, has been formulated through a General Plan Advisory Committee, consisting of 20 appointed residents and business people in the community. This provided a broad based consensus of the goals, policies and programs that will be included in the General Plan. The City has also distributed community flyers, to inform residents of the General Plan process and ways in which they can provide input. Public hearings are scheduled before the Planning Commission and City Council, to solicit public comments and suggestions on the Plan, prior to its adoption.

This Housing Element will have to be reviewed in 1996. At that time, the City will review its goals and programs and provide better definition of the City's objectives for the 1996-2000 planning period. The updated Element shall be submitted to HCD for review prior to adoption.

## **GOALS AND POLICIES**

The Housing Element outlines the City's intent to address the housing needs of the area through cooperation with the private sector and coordination with other public agencies. The goals and policies of the Housing Element address the housing needs of the City, in relation to the characteristics of its resident population and households, housing for special needs groups, accessibility, affordability, maintenance of the housing stock, and the removal of constraints to housing production.

### **Housing Maintenance and Preservation**

**GOAL 1:** Encourage the maintenance and rehabilitation of the existing housing stock.

**Policies:**

- 1.1 Support and provide incentives for the maintenance, conservation and revitalization of existing residential units.
- 1.2 Explore strategies and programs that will be effective in reducing the costs incurred by the homeowner for rehabilitation.
- 1.3 Encourage residential rehabilitation and provide technical assistance to property owners, as needed. Develop owner and rental rehabilitation programs to preserve and conserve the City's housing stock.
- 1.4 Promote housing rehabilitation and preservation through public awareness programs.
- 1.5 Encourage property maintenance to promote quality architectural design, public safety, and energy conservation.
- 1.6 Preserve existing single-family, lower density residential neighborhoods.
- 1.7 Encourage maintenance and rehabilitation to maintain the integrity of mobile home parks.
- 1.8 Provide adequate standards for remodeling and expansion of existing residential units to insure compliance with State and Uniform Building Code requirements and to insure compatibility with surrounding residential development.



- 1.9 Participate in federal and state housing programs designed to improve and increase the City's housing stock.

## **Equal Opportunity**

**GOAL 2:** Promote housing access and equal opportunity for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color or handicap.

### **Policies:**

- 2.1 Prohibit discrimination in the sale or rental of housing with regard to race, ethnic background, religion, handicap, income, sex, age, and household composition.
- 2.2 Establish referral agencies to serve low-income households, the handicapped, the homeless, the elderly, and residents with special housing needs.
- 2.3 Enforce fair housing laws and encourage the use of fair housing counsel and referral services.
- 2.4 Promote equal access and housing opportunities through the provision of consumer information, assistance and protection and through citizen involvement in the design and implementation of housing programs.
- 2.5 Encourage citizen participation in the development and implementation of housing programs.

## **Housing Production**

**GOAL 3:** The City will work to provide opportunities for the development of new housing units to meet the housing needs of all economic segments of the population without disrupting the existing rural community feeling and without compromising environmental integrity.

### **Policies:**

- 3.1 Encourage a variety of housing arrangements and densities, each appropriately located with reference to topography, traffic circulation, community facilities, and aesthetic considerations.
- 3.2 Promote development density in the City that is consistent with environmentally sound development that does not disrupt the fragile natural topography.

- 3.3 Encourage a balance of housing in a variety of types to provide a range of housing affordable to households at all economic levels. Housing types should include townhouses, cluster developments, apartments, single-family dwelling, and manufactured homes.
- 3.4 Encourage continued and new investment in the established communities of Calimesa.
- 3.5 Promote first time buyer assistance programs to enable young families to acquire housing.
- 3.6 Encourage the development of housing to meet the City of Calimesa's responsibilities to the regional housing needs.
- 3.7 Works towards the provision of affordable housing units in new residential developments.

### **Housing Opportunities**

**GOAL 4:** Improve the housing supply and the choice of housing opportunities through private investment and, where necessary, through public assistance and financing.

#### **Policies:**

- 4.1 Encourage future investment in the City's housing stock.
- 4.2 Promote the development of attractive and safe housing to meet the community's needs.
- 4.3 Provide prompt processing of housing construction applications through standardized development requirements and centralized processing.
- 4.4 Recognize the changing trends and patterns in the community and encourage a broad range of housing types to meet these needs.
- 4.5 Encourage a variety of public and private efforts in providing affordable housing opportunities for lower income households, elderly households, overcrowded households, farmworkers, the handicapped, and female-headed households.
- 4.6 Manufactured homes on permanent foundations shall be allowed in all residential areas.
- 4.7 Explore available private and public funding sources for the development of special needs housing in the City.

- 4.8 Reduce the costs associated with the development of special needs housing projects (affordable housing, senior citizen housing, etc.) through density bonuses, waiver of fees, lower development standards, fast track processing, or other incentives.

## **HOUSING PLAN**

The City of Calimesa seeks to provide adequate housing for its existing and future residents through a Housing Plan that has been designed to address goals relating to:

- Housing Maintenance and Preservation
- Equal Opportunity
- Housing Production
- Housing Opportunities

The Housing Plan for the City focuses on the identified housing needs of Calimesa, with priority given to the need of existing residents and neighborhoods. Housing maintenance, rehabilitation and neighborhood preservation will be the primary goal of many housing programs. This will improve residential neighborhoods and conserve the affordability of existing dwelling units. It will also provide residents with a better living environment.

The City has an ongoing program for the maintenance and conservation of the existing housing stock. There are programs aimed at the conservation of older housing units which are in good condition, to maintain these units as affordable housing options. Rehabilitation and property maintenance programs ensure that living conditions are safe and decent for all households. By maintaining the existing housing stock and preventing the creation of substandard housing, the City ensures that residents have adequate housing.

Neighborhood preservation is seen as a mechanism to increase home-ownership in the City, to promote property maintenance, and to maintain a more stable resident population. By improving public services and infrastructure in existing neighborhoods, the City hopes to provide a more attractive residential environment.

Aside from housing preservation, the City wants to ensure that all residents have equal access to housing and housing opportunities. The City has programs which would minimize difficulties of special needs households in finding adequate housing. These programs prevent discrimination and encourage the production of housing specifically designed for special needs households. Programs are also proposed to provide adequate housing for senior citizens, the handicapped, homeless, farmworkers, single-parent households, and other special households.

The City recognizes that it is responsible for the accommodation of future household growth in the region and the development of affordable housing. The City is seeking ways to meet the needs of its residents for affordable housing and to accommodate its fair share of regional housing. Programs to encourage housing production in the City will allow Calimesa to develop dwelling units needed



to meet the existing and future demand for housing in the area. The City will find ways to remove factors which increase housing prices and rents, as well as those that discourage housing development.

Aside from housing to meet latent demand, the City believes that increasing housing opportunities in Calimesa will lead to other benefits for residents. These benefits may include lower rents/prices with a higher vacancy rate; and development of a variety of housing for different household types, stages and lifestyles. Calimesa is exploring ways to encourage developments which would provide greater housing opportunities in the City.

While housing development can be initiated by the City, private developers or other agencies, the majority of new residential development is expected to be initiated by the private sector because of limited financial resources on the part of the City, State, and Federal governments. Developers will generally provide market rate housing and housing projects funded by local, state, and federal agencies are likely to be reserved for low and moderate income households. The City shall work with all these entities for increasing housing opportunities in Calimesa.

Because of staff, time and funding constraints, the City's Housing Plan prioritizes the implementation of housing programs. Programs for the preservation of the existing housing stock and the residential neighborhoods will be given priority. Fair housing programs will follow, along with measures to assist special needs households. Housing production programs are given third priority, in order to meet future demand. Because housing opportunity is indirectly encouraged by large vacant areas in the City, programs for increasing residential opportunity will be given the least priority. Thus, the Housing Plan will lead to assistance to the majority of existing residents and households in need, before housing for future residents is attempted.

### Quantified Objectives

The quantified objectives of the City by income category are provided in Table 3-2. The City's objective is to assist in the rehabilitation of 50 housing units; the conservation/preservation of 1,100 units; assistance to 600 persons and households; and the construction of at least 420 new dwelling units between 1989 and 1996.

TABLE 3-2 QUANTIFIED HOUSING OBJECTIVES for 1989-1996					
	Income Category				
	Very Low	Low	Moderate	High	Total
Housing Rehabilitation	10	15	25	0	50
Conservation/ Maintenance	200	400	500	0	1,100

**TABLE 3-2**  
**QUANTIFIED HOUSING OBJECTIVES for 1989-1996**

	Income Category				
	Very Low	Low	Moderate	High	Total
Equal Opportunity	150	300	150	0	600
New Construction	30	70	120	200	420
<b>TOTAL</b>	<b>390</b>	<b>785</b>	<b>795</b>	<b>200</b>	<b>2,170</b>

## IMPLEMENTATION PROGRAMS

Individual programs to implement the City's Housing Plan are listed below. As a new city, most of Calimesa's programs will have to be formulated and studied prior to adoption and initiation. Also, because of limited resources, the programs will have to be spread throughout the planning period. These programs are listed below, including the time frame for implementation, agency responsible for implementation, and the funding source. The City assumes that housing programs will be funded by the General Fund, redevelopment funds and CDBG funds and other grants which may be obtained in the future. The programs are listed by time frame.

### 1. Access for the Disabled

The City currently requires new housing development to comply with State standards for access for the disabled. It also enforces the recently adopted American with Disabilities Act. This program will lead to the provision of access for the disabled to public structures and a number of dwelling units constructed between 1989 and 1996.

**Agency:** Planning Department

**Time Frame:** Ongoing

**Funding:** General Fund, Redevelopment Funds, Highway Funds

### 2. Citizen Participation Program

The City encourages community participation in all city programs. Noticing practices in the City include posting information on scheduled public hearings at City Hall, the Post Office, Water Company Office, Library, and the Council Chambers at least two weeks prior to the hearing dates. The City also advertises these hearings, as well as other city programs, in the local newspaper and in the City newsletter. It shall encourage residents to attend City Council and Planning Commission meetings by increased publicity practices. The City has performed a community-wide attitude survey to determine resident concerns and preferences. It also publishes a City newsletter and community flyers to inform residents of ongoing activities and programs in Calimesa, including the development

of its General Plan. The local newspaper also serves as an information resource for City programs and public hearings.

Increased publicity would allow the City to get more input into its programs and tailor them to meet the needs expressed by residents. Public hearings will be held prior to adoption of the General Plan, including this Element. This will allow the City to better respond to the concerns and interests of residents.

The City shall encourage citizen participation in all housing programs. This shall include notice of all proposed housing programs and Housing Element updates. It shall encourage public input into its programs. This Housing Element was formulated through the General Plan Advisory Committee and will receive extensive public review prior to adoption.

**Agency:** Planning Department

**Time Frame:** Ongoing

**Funding:** General Fund

### **3. Code Enforcement**

The City shall continue code enforcement of nuisances such as inoperable vehicles, unsightly condition of property, substandard units, and illegal garage conversions. It shall identify substandard dwelling units and encourage rehabilitation through the provision of technical support and incentives such as streamlined permit processing, variances to development standards on a case by case basis (when legally justified), waiver of fees or fines if rehabilitation is undertaken within short order, etc. Also, it shall actively work towards the rehabilitation of structures which do not meet current electrical code requirements. Approximately 10 housing units are expected to be upgraded and maintained through this program.

**Agency:** Planning Department

**Time Frame:** Ongoing

**Funding:** General Fund, CDBG Funds

### **4. Density Bonus and Incentives**

The City shall adopt a density bonus ordinance in accordance with State law. The ordinance shall provide incentives and density bonuses for senior housing projects and very low and low income housing projects. These incentives may include reduced parking standards, variances in setbacks, building heights, open space, density, lot coverage, and other development standards, waiver of processing fees, and the like. Expediting the review process saves money and reduces housing costs, and therefore, can also be considered an incentive. Approximately 20 units are expected to be built through density bonuses or incentives during this planning period. Units built with these incentives shall be deed restricted, to preserve their affordability throughout the life of the project.



**Agency:** Planning Department

**Time Frame:** 1994

**Funding:** General Fund

## **5. Design Guidelines**

Design review is currently part of the City's review process and is completed within the 2 to 3 months of project application. In order to provide developers and city officials with consistent standards for new development, the City shall develop residential design guidelines for use in the design review process. These guidelines shall establish standards for architectural design, yards, open space, landscaping, fencing, parking, etc. Design review allows the City to suggest changes to the external features of a development, in order to maintain and develop community character and identity. These guidelines will help developers in the design of their project according to City expectations and will prevent the discretionary and subjective review of the project's aesthetic qualities. The City shall analyze and ensure that the guidelines do not unnecessarily extend the review period for developments or add excessive costs to construction. The guidelines shall be developed to provide a variety of options without necessarily dictating styles or features which could add to the project's development costs.

As part of the development review process, the Planning Department shall evaluate a proposed project's compatibility with existing development and these design standards.

**Agency:** Planning Department

**Time Frame:** 1996

**Funding:** General Fund

## **6. Development Monitoring Program**

The City shall cumulatively assess the potential impacts from new development. The City will require as part of the development review package, that all new development provide an assessment to ensure that adequate infrastructure is available to serve the development. As part of this program, the City shall monitor land development by outlining actual housing densities on residential land in the City. This will provide information on available land and densities.

The development monitoring program will also monitor development needs and demands. The need for multi-family development is expected to be accommodated by development in the Residential High category, most of which is currently vacant. The City will monitor the availability of high density multi-family zoned land and initiate any rezonings as needed, to maintain an adequate supply of high density residential land.

**Agency:** Planning Department, Public Works, Fire Department, Yucaipa Valley Water District  
**Time Frame:** 1994  
**Funding:** General Fund

## **7. Energy Conservation**

The City shall continue to enforce energy conservation guidelines as contained in the Uniform Building Code. All housing units constructed between 1989 and 1996 will be constructed with energy conservation features.

**Agency:** Building and Safety Department  
**Time Frame:** Ongoing  
**Funding:** General Fund

## **8. Information and Referral Programs**

The City shall continue to use the City newsletter and brochures to advertise or inform residents of services and programs that are made available, including housing regulations, rehabilitation programs, nearby service agencies, crisis hotlines, energy conservation, availability of low and moderate income housing units, and other such services. The City's Community Center currently provides many of the information and referral services needed by residents. Approximately 200 calls are handled monthly.

The City shall prepare a list of available service and referral agencies that serve low-income households, handicapped, elderly, homeless, and other special needs groups. It shall make the list available at City Hall, the Senior Center, the library and other public places for easy access to interested persons. This program will be initiated in 1994.

**Agency:** Parks and Recreation Department  
**Time Frame:** Ongoing  
**Funding:** General Fund

## **9. Infrastructure and Public Services**

The City shall work with responsible agencies and purveyors of utilities and infrastructure (such as the Yucaipa Valley Water District, Yucaipa Calimesa School District, etc.) in monitoring the availability and service levels of public utilities and infrastructure, (roads, water, sewer, storm drainage, gas, power, etc.) and services (police, fire protection, schools, government services, etc.). It shall prioritize the need for capital improvements and increase public service levels, when necessary. The City shall ensure that new development can be served by existing infrastructure and public services. Otherwise, improvements and upgrades shall be undertaken as part of the development, through facility fees or prior to the occupancy of the dwelling units.

**Agency:** Planning Department**Time Frame:** Ongoing**Funding:** General Fund**10. Land Use Regulations**

The Land Use Plan of the General Plan has been developed to promote new residential development in the City. The Plan has several features which were developed to increase the availability of housing and maintain the existing housing stock. The Land Use Plan preserves existing neighborhoods by assigning compatible residential designations for existing neighborhoods. Vacant areas of the City have also been designated for future residential development at various densities.

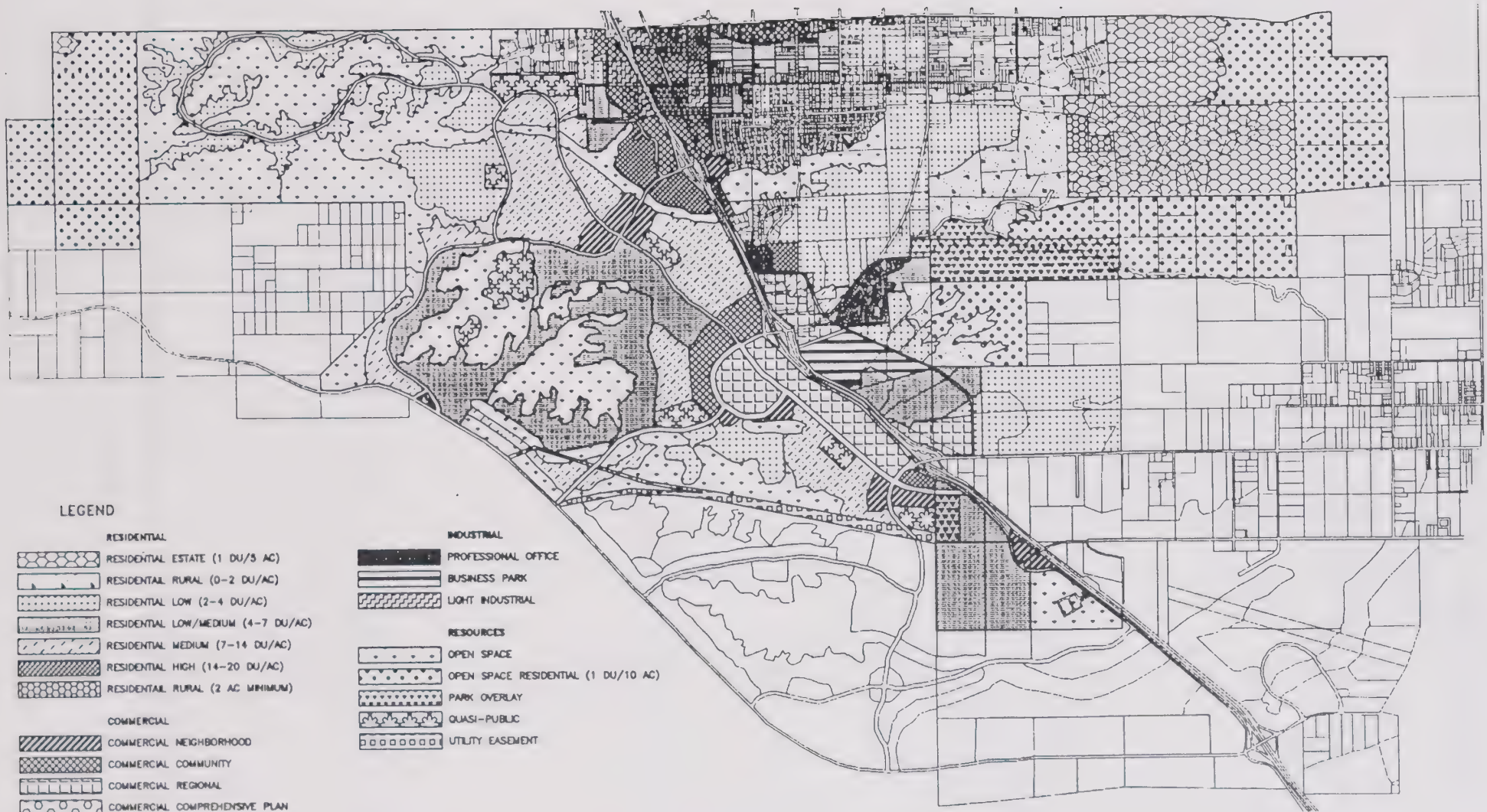
The residential areas in the Land Use Plan, shown in Exhibit 3-1, provides for a buildout capacity of 20,356 dwelling units. This translates to a buildout population of approximately 48,854 residents (assuming the 1990 average household size of 2.4 persons per household remains constant). Table 3-3 provides a breakdown of acreage for each residential land use designation and potential housing capacity.

TABLE 3-3 DWELLING UNIT CAPACITY			
Land Use Designation	Acres	Density	Dwelling Unit Capacity*
Open Space Residential	1,202.7	10 ac/du	120
Residential Estate	635.9	5 ac/du	127
Residential Rural	803.8	0-2 du/ac	804
Residential Low	1,291.0	2-4 du/ac	3,873
Residential Low/Medium	1,146.5	4-7 du/ac	6,308
Residential Medium	670.3	7-14 du/ac	7,038
Residential High	122.7	14-20 du/ac	2,068
Total	5,872.5		20,356
du - dwelling unit                      ac - acre                      * based on average density Source: David Evans and Associates, Inc., 1993.			

The buildout capacity of the Land Use Plan represents an increase of over 15,000 units above the existing housing stock. While only 40 housing permits have been issued during the past 2½ years, the population growth of the area is anticipated to create an increased demand for housing. Approximately 420 units are expected to be built in the next 5 years with private investments. Aside from these, underutilized sites with older developments can accommodate additional housing development in the future.

**Agency:** Planning Department**Time Frame:** Ongoing**Funding:** General Fund





# LEGEND

<b>RESIDENTIAL</b>		<b>INDUSTRIAL</b>	
	RESIDENTIAL ESTATE (1 DU/5 AC)		PROFESSIONAL OFFICE
	RESIDENTIAL RURAL (0-2 DU/AC)		BUSINESS PARK
	RESIDENTIAL LOW (2-4 DU/AC)		LIGHT INDUSTRIAL
	RESIDENTIAL LOW/MEDIUM (4-7 DU/AC)	<b>RESOURCES</b>	
	RESIDENTIAL MEDIUM (7-14 DU/AC)		OPEN SPACE
	RESIDENTIAL HIGH (14-20 DU/AC)		OPEN SPACE RESIDENTIAL (1 DU/10 AC)
	RESIDENTIAL RURAL (2 AC MINIMUM)		PARK OVERLAY
<b>COMMERCIAL</b>			QUASI-PUBLIC
	COMMERCIAL NEIGHBORHOOD		UTILITY EASEMENT
	COMMERCIAL COMMUNITY		
	COMMERCIAL REGIONAL		
	COMMERCIAL COMPREHENSIVE PLAN		



## **11. Manufactured Housing**

A number of manufactured home developments can be found in the City. The City shall continue to allow manufactured homes and modular units on permanent foundations on single-family lots. Approximately 200 manufactured units are expected to be built between 1989 and 1996.

**Agency:** Planning Department

**Time Frame:** Ongoing

**Funding:** General Fund

## **12. Mobile Home Parks**

The City's Zoning Ordinance includes a mobile home park designation, specifically to encourage this type of development and to preserve existing mobile home parks. The mobile home parks are subject to rent control under the County's Regulation 606. To preserve these developments as affordable housing alternatives in the City, the City has formed a commission designed to address the rent control, problems, and grievances of mobile home owners. The Commission is currently studying the need for stricter regulations on rents, park operations and maintenance. This program will assist the 1,100 mobile home owners in the City.

**Agency:** Planning Department

**Time Frame:** Ongoing

**Funding:** General Fund

## **13. Relocation Assistance**

The City shall continue to provide relocation assistance for displaced persons for all public and private development projects, including rehabilitation and code enforcement projects which lead to the displacement of households.

**Agency:** Planning Department

**Time Frame:** Ongoing

**Funding:** General Fund

## **14. Second Unit Ordinance**

The City shall continue to allow second units on single-family lots, subject to a minimum lot size. This leads to additional units on most lots in the R-1 zone and provides opportunities for affordable housing. Approximately 10 second units are expected to be built between 1989 and 1996.



**Agency:** Planning Department  
**Time Frame:** Ongoing  
**Funding:** General Fund

#### **15. Senior and Low Income Household Programs**

The City provides a variety of services to senior citizens and low income households, including tax and legal services, outreach programs, rental property information, nutrition program, food and hot meals (through County Office of Aging, SHARE, and Riverside Food Bank), abuse protection (through County's Adult Protective Agency), recreational and social activities, etc. Approximately 300 senior citizens avail of these programs weekly.

**Agency:** Parks and Recreation Department  
**Time Frame:** Ongoing  
**Funding:** General Fund

#### **16. Cooperative Planning**

The City shall work with Riverside County on the provision of adequate infrastructure and public services. It shall coordinate County and City capital improvement projects. This includes setting priorities for infrastructure and public service projects through the City's capital improvement program. The City shall coordinate with state and regional agencies and area planning districts (Western Riverside Council of Governments) on addressing planning and environmental issues. It shall initiate talks with adjacent cities on potential area-wide strategies to promote jobs/housing balance.

**Agency:** Planning Department  
**Time Frame:** 1993  
**Funding:** General Fund

#### **17. Development Fee Review**

The City shall annually review its permit processing fees to verify that the costs associated with the review process are consistent with the services rendered. This fee review process will provide a basis for reducing fees which may be posing a constraint to housing production, and at the same time allow the City to recoup costs associated with the review and processing of individual developments. The feasibility of reducing the processing and permit fees for affordable housing or other special needs housing shall be studied to assist these special projects.

**Agency:** Planning Department  
**Time Frame:** 1993  
**Funding:** General Fund

## **18. Federal and State Housing Programs**

City staff will strive to keep informed of state and federal housing programs and provide information on housing programs, grants, funds, loans and services that will help residents, developers, and other groups in maintaining their units or obtaining housing assistance. It shall explore available public subsidies and other sources that could provide housing services and assistance to affordable housing projects in the City. It shall also promote the use of lending institution housing funds (as required for community reinvestment) for housing construction and rehabilitation projects in the City.

Because of the limited resources in the City, the City shall work towards obtaining grants, funds and assistance from county, state and federal agencies for housing projects in the City. The City shall review all available state and federal housing programs and determine which programs that City may be eligible. It shall apply for funds annually to augment the City's resources for housing programs. The City shall talk to local banking institutions to determine if funds can be made available for housing rehabilitation or construction. The City shall then publicize the availability of these funds to local residents.

**Agency:** Planning Department

**Time Frame:** 1994

**Funding:** General Fund, CDBG Funds, Redevelopment Funds, HOME Funds

## **19. Zoning Ordinance Revision**

Following the adoption of the General Plan, the City will revise its Zoning Ordinance, so as to achieve consistency between the Land Use Plan and the development standards in its Zoning Ordinance and other land use regulations. The City will ensure that zoning and development standards do not unnecessarily increase housing costs, especially for lower income households. Incentives and density bonuses for affordable housing projects shall be outlined in the revised Zoning Ordinance. These incentives may include reduced parking standards, density bonuses, variances in setbacks, building heights, open space, density, lot coverage, and other development standards, waiver/reduction of processing fees, expediting the review process, and the like.

**Agency:** Planning Department

**Time Frame:** 1994

**Funding:** General Fund

## **20. Fair Housing Council**

The City shall set up an agreement with a nearby fair housing council, through which resident complaints and tenant/landlord disputes may be settled. The City shall inform the public of the availability of this service through the City newsletter and local papers, and instruct City employees to refer relevant questions or complaints to the Council.

**Agency:** Parks and Recreation Department

**Time Frame:** 1994

**Funding:** CDBG Funds

## **21. Housing Information Program**

To encourage the development of high quality housing, the City shall establish a promotional campaign to area developers. The campaign shall promote the City and existing investment opportunities. The City shall work with local business groups (such as the Chamber of Commerce and Building Industry Association) on promoting available incentives to new development. This may be accomplished through networking, formal presentations, brochures, ads, and other promotional materials and activities. Pre-application meetings with developers shall be encouraged. This will help staff keep abreast of planned projects in the City and inform developers of City guidelines and regulations early in the process.

**Agency:** Planning Department

**Time Frame:** 1994

**Funding:** General Fund

## **22. Housing Rehabilitation Program**

The City applies to Riverside County for CDBG funds. The City is planning to use their Community Development Block Grant Program (CDBG) funds for rehabilitation of existing housing units. The program will provide grants, no or low interest loans, or deferred interest loans to qualifying low and moderate income households for the repair of their housing units. Redevelopment programs may also include housing rehabilitation through the 20 percent set-aside. Approximately 25 units are expected to be assisted between 1989 and 1996. The City shall also explore the possibility of offering rehabilitation assistance for rental units through its CDBG program.

The City's Rehabilitation Program shall allow room additions for overcrowded owner households and shall work towards to upgrade of garage conversions to habitable rooms. It shall also review its Zoning Ordinance to provide incentives for the development of multi-family units with 3 or more bedrooms. These incentives may include reduced setbacks or landscaping requirements, height exemptions, density bonuses, fee waivers for minor alterations, or other variances of development standards which may encourage housing rehabilitation and/or large units.

This program shall be promoted through the City newsletter, local newspaper articles, and through campaigns with local developers and agencies.



**Agency:** Planning Department

**Time Frame:** 1994 on

**Funding:** CDBG Funds, Redevelopment Set-Aside, HOME Funds

### **23. Senior Housing Projects**

The City shall explore the availability of state and federal funds for the construction of senior citizen housing projects. This may include funds provided under Section 202, HOME, Section 8, etc.

**Agency:** Planning Department

**Time Frame:** 1994

**Funding:** General Fund, CDBG Funds, HOME Funds

### **24. Homebuyer Assistance**

Increases in the homeowner population make neighborhoods more stable and create a greater sense of community. To encourage home ownership in the City, the City shall develop a program to establish a subsidy fund to assist first time homebuyers.

**Agency:** Planning Department

**Time Frame:** 1995

**Funding:** General Fund, CDBG Funds, Redevelopment Funds, HOME Funds

### **25. Housing Maintenance Program**

The City shall encourage the maintenance of existing residential units, since they present opportunities for affordable housing. The City shall promote housing rehabilitation to area residents through advertisements in the local paper. This will include practices that promote energy conservation, waste reduction and recycling, water conservation, litter prevention, vandalism prevention, and the like. At the same time, the City shall continue the maintenance of roadways, parkways, sidewalks, and public infrastructure. Other maintenance efforts may include code enforcement, beautification programs, volunteer clean-ups, graffiti removal, etc.

**Agency:** Planning Department

**Time Frame:** 1995

**Funding:** General Fund, CDBG Funds, Redevelopment Funds, other grants

### **26. Local Hotels/Motels**

The City shall work with local hotel/motel operators to have short-stay vouchers available for persons who are homeless, evicted, or in need of temporary housing.

**Agency:** Planning Department  
**Time Frame:** 1995  
**Funding:** General Fund, CDBG Funds

## **27. Redevelopment Program**

The City will be taking over the management of the redevelopment project area located east of the freeway and south of County Line Road, from the County. As required by redevelopment law, the City shall set-aside 20 percent of each year's Redevelopment Agency budget from its tax increment funds, for the construction or rehabilitation of low and moderate income housing units in the City. While no specific housing project has been identified, approximately 25 units are expected to be constructed and/or assisted under this program.

Negotiations are currently ongoing and the acquisition of the redevelopment project area is expected to be completed by 1995. The estimate of funds that may be derived from the redevelopment area has not been completed at this time. This will be made once the City establishes a Redevelopment Agency and a Redevelopment Plan for the area. Funds that would be transferred to the City will depend on the results of ongoing negotiations with the County. Programs identified for funding with redevelopment monies will be implemented according to the availability of funds. Other sources and options will be considered if redevelopment funds are not adequate or are not available in the near term.

Within 2 years of establishing the Redevelopment Agency for the City, it shall designate funding projects for its 20 percent set-aside funds.

**Agency:** Redevelopment Agency  
**Time Frame:** 1995 onward  
**Funding:** Redevelopment Funds

## **28. Section 8 Programs**

The U.S. Department of Housing and Urban Development offers Low Income Rental Assistance (Section 8) for lower income groups. The Section 8 Existing Housing Certificate Program subsidizes a portion of the monthly rents of low income households. The rent amount above 30 percent of the household income and up to the fair market rent of the unit is paid by local housing agencies. The Section 8 Existing Housing Voucher Demonstration Program expands the program by using fair market rents to determine subsidy levels but renters may pay more if they choose units with higher rents.

The City shall provide eligible residents with information regarding the availability of Section 8 programs for low and moderate income households. These programs will help overpaying

households in the City by providing rental assistance payments. Because of funding cutbacks, it is not possible to estimate how many Calimesa households could be served by this program from 1989 to 1996.

**Agency:** Planning Department

**Time Frame:** 1995

**Funding:** General Fund

## **29. Streamlined Permit Processing**

The City shall develop standards which provide streamlined permit processing and requirements for affordable housing projects and high quality housing projects. The standards shall include design guidelines for architectural design, as well as a standardization of the application requirements to reduce the time and costs associated with development approval. The standards shall include guidelines for the development of a variety of unit types to accommodate different household needs.

**Agency:** Planning Department

**Time Frame:** 1995

**Funding:** General Fund

## **30. Underutilized/Vacant Infill Lots**

The City shall identify underutilized and vacant infill lots and work with the property owners or local developers in the redevelopment of these areas for housing development or mixed-use (single family and multi-family) developments.

**Agency:** Planning Department

**Time Frame:** 1995

**Funding:** General Fund

## **31. Farmworker Housing**

The City shall explore ways in which to provide farmworker housing. This may include requiring businesses employing 15 or more farmworkers to provide housing for farmworkers, soliciting non-profit agencies to develop farmworker housing in the City, or designating some affordable housing units for farmworkers, etc.

**Agency:** Planning Department

**Time Frame:** 1996

**Funding:** General Fund



### **32. Non-profit Agencies**

The City shall seek out and encourage non-profit agencies to provide services to the City and develop affordable housing projects that would help Calimesa residents. This may include agencies assisting low and moderate income households, senior citizens, minorities, handicapped, and other persons with special needs.

The City shall encourage non-profit agencies and developers to provide affordable housing through incentives such as streamlined review processing, reduced or no processing fees, density bonuses, lower development standards; and assistance in obtaining grants and loans from appropriate agencies.

**Agency:** Parks and Recreation Department

**Time Frame:** 1996

**Funding:** General Fund

### **33. Senior Shared Housing Service**

The City shall participate in senior shared housing program by the County. As such it shall refer seniors interested in shared housing arrangements to the County in order to benefit from the larger database and available resources. The Calimesa Senior Center is a subcontractor for the County and operates many of the senior programs for local residents. The shared housing program for seniors and other residents who serve as a way of reducing housing costs.

**Agency:** Parks and Recreation Department

**Time Frame:** Ongoing

**Funding:** General Fund

### **34. Inclusionary Housing Program**

The City shall explore the feasibility of requiring affordable housing units within new housing developments. This may be promoted by density bonuses and other incentives, coupled with a use restriction on the affordable units. The City may also require developers to provide a minimum percentage of affordable housing or pay fees, dedicate land or establish agreements with other agencies for the construction of affordable units off site.

As required under Redevelopment law, the Calimesa Redevelopment Agency shall adopt a plan for providing at least 30 percent of all dwelling units developed or rehabilitated by the Agency to be affordable to low and moderate income households. The plan should also identify ways to ensure that 15 percent of all new and rehabilitated units by other public or private entities within the project area are affordable to low and moderate income households.

**Agency:** Planning Department, Redevelopment Agency

**Time Frame:** 1997

**Funding:** General Fund, 20 percent Redevelopment Set-aside

### **35. Land Writedown Program**

The City and the Redevelopment Agency shall explore the possibility of buying land and providing land writedown for an affordable housing project. Cooperative ventures with developers on housing projects may also be initiated by the City.

**Agency:** Planning Department, Redevelopment Agency

**Time Frame:** 1997

**Funding:** General Fund, Redevelopment Funds





Attachment A

CHECKLIST TO CONFIRM LACK OF AT-RISK UNITS  
PURSUANT TO GOVERNMENT CODE SECTION 65583(A)(8)

Jurisdiction CALIMESA

Date SEPTEMBER 1993

1. HUD programs:

Section 8 Lower-Income Rental Assistance project-based programs:

New Construction  
Substantial or Moderate Rehabilitation  
Property Disposition  
Loan Management Set-Aside

Section 101 Rent Supplements

Section 213 Cooperative Housing Insurance

Section 221(d)(3) Below-Market-Interest-Rate Mortgage Insurance Program

Section 236 Interest Reduction Payment Program

Section 202 Direct Loans for Elderly or Handicapped

☒ there are no such units for our jurisdiction listed in the Inventory of Federally Subsidized Rental Units At Risk of Conversion, 1990 or subsequent updated information made available by HPD.

☐ units for our jurisdiction in the above inventory are not at risk during the ten-year analysis period; no units are at risk until  (year).

2. Community Development Block Grant program (CDBG)

☐ jurisdiction has not used CDBG funds

☒ jurisdiction has not used CDBG funds for multifamily rental units

☐ although CDBG funds have been used for multifamily rental rehabilitation, staff responsible for this program indicate there are no affected units because

3. Redevelopment programs

☒ jurisdiction does not have a redevelopment agency

☐ redevelopment funds have not been used on multifamily rental units; or

although redevelopment funds have been used for multifamily rental units, staff responsible for this program indicate there are no affected units because

\_\_\_ a) income-restrictions for occupancy were not required for existing units, or

\_\_\_ b) other reasons: \_\_\_\_\_

4. FmHA Section 515 Rural Rental Housing Loans

- ☒ jurisdiction has not been located in a qualifying rural FmHA area  
\_\_\_ according to information made available by HPD, there are no such eligible projects reported by FmHA within the community or unincorporated area  
\_\_\_ FmHA staff checked the status of \_\_\_\_\_ (name) \_\_\_\_\_ development(s) and reported that it is not eligible for prepayment or not eligible for prepayment within the ten-year analysis period.

5. State and local multifamily revenue bond programs

- ☒ no bond-financed units eligible to terminate affordability controls within the next ten years were reported in the following publication: 1990 Annual Summary: The Use of Housing Revenue Bond Proceeds, California Debt Advisory Commission, and

\_\_\_ local housing authority staff indicate there are no such units within the community.

6. Local in-lieu fee programs or inclusionary programs

- ☒ jurisdiction has not had an in-lieu fee or inclusionary program  
\_\_\_ staff responsible for these programs indicate no affected units

7. Developments which obtained a density bonus and direct government assistance pursuant to Government Code Section 65916.

☒ jurisdiction has no projects approved pursuant to this law

☐ staff responsible for this program indicate no affected units

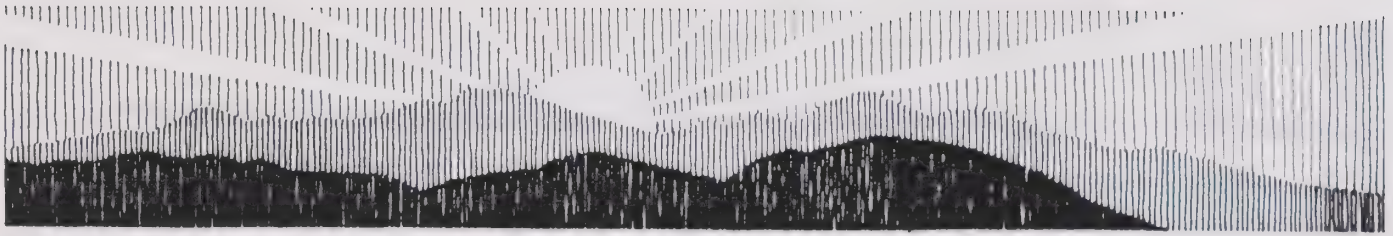
8. Additional comments related to any of the above:

No residential projects in the City were developed with density bonus incentives, redevelopment funding assistance or inclusionary restrictions under the County's regulations. Thus, no affordability restrictions are currently in place in the City.

lmwb:preserve.he







## RESOURCE MANAGEMENT ELEMENT

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### INTRODUCTION

Natural resources within the City of Calimesa include land and water resources, plant and animal life, cultural resources, and open space. Cultural and historical resources include historical structures and archaeological and paleontological artifacts in the City. Open space refers to land or water which is unimproved and devoted to the preservation of natural resources, and includes vacant land, parks, and recreational facilities. Within Calimesa, open space includes steep hillside areas unsuitable for development, and undeveloped areas which comply with existing land use controls such as building setback areas, utility easements, and school playing fields. Recreational facilities include the Norton Younglove Multipurpose Senior Center, the Calimesa Golf and Country Club, walking, multi-purpose and equestrian trails, and private school playground areas.

Natural and cultural resources are limited, often non-renewable and need to be carefully preserved and managed. This will prevent potential misuse and ensure their future availability. The City of Calimesa has identified important local resources and the necessary preservation programs to prevent their destruction and exploitation and to ensure that conservation efforts are consistent and equitable. The City's Resource Management Element outlines conservation programs that deal with resource utilization, preservation techniques and the regulation of activities which affect or preclude the utilization of resources. It includes the maintenance of open space areas and the provision of parks and recreational facilities.

### Relationship to the General Plan

The Resource Management Element (RME) of the Calimesa General Plan combines the mandated Conservation and Open Space Elements. The RME complies with regulations in *Sections 65302(d) and 65302(e) of the California Government Code* and the *State Mining and Reclamation Act* (SMARA). The RME identifies significant resources within the City and establishes a plan for their conservation, management, or preservation. It includes an open space plan for the long-range preservation of open space land.

The Calimesa Resource Management Element addresses conservation issues to increase awareness of the presence and condition of natural and cultural resources and to promote the advantages of conservation and management. The City's conservation plan will consist of independent programs for the management of soil resources and agricultural land, the conservation of groundwater resources, the protection of native plant and animal life, the preservation of visual qualities and cultural and historic resources. The plan will help maintain an ecological balance and improve the quality of life in Calimesa.

The Resource Management Element also fulfills the requirements of *Section 65560 to 65570 of the California Government Code* regarding the preparation of an open space plan for the City. The Element contains a local open space plan for the comprehensive and long-range preservation and conservation of the City's open space land. Specific action-oriented programs serve as the primary implementation tool of the open-space plan. All projects, including the acquisition and disposal of open space lands, shall be consistent with the open space plan. In addition, Public Resources Code Section 5076 requires the open space element to consider demands for trail-oriented recreational use and develop specific open space programs which respond to these demands. The feasibility of integrating trail routes with the appropriate segments of the county and state trail system is considered in this Element.

Open space and recreation issues are brought together because areas preserved as open space are valuable resources for both outdoor recreation and scenic enjoyment. Also, the major open space areas in Calimesa present opportunities for the conservation of existing natural resources. The goals and policies of this Element build upon those in other components of the General Plan. The Land Use Element designates specific areas for open space and conservation areas. The Safety Element identifies areas with constraints that should be preserved in open space for public health and safety reasons.

## **SUMMARY OF ISSUES**

Conservation, open space, and recreation issues that affect the City of Calimesa are summarized below. More detailed information on these topics can be found in the Resource Management Element Profile Report.

- Soils: Soils within the north central portion of Calimesa are generally suitable for development purposes. Soil resources in the Calimesa Hills and the San Timoteo Badlands areas (north and southwest of the City) have unstable soil properties, which restrict their development potential. Although sand, rock and gravel resources have been identified in areas east of Calimesa, the Division of Mines and Geology does not identify these resources as extending into Calimesa. The combination of high quality, well-drained, gently sloping areas within the City has supported a variety of agricultural crops. Preservation of agricultural areas will assist in maintaining the rural qualities of the City.
- Water Resources: The City is dependent upon groundwater from the San Timoteo formation and obtains its water supply from a system of local groundwater wells operated by the Yucaipa Valley Water District and the South Mesa Water Company. Irrigation needed for the original agricultural practices shaped the course of local streams. Drainage courses also support riparian habitats and provide for flood control. The preservation of groundwater and local streams secures an available and quality groundwater supply, serves flood control purposes, and maintains the area's wildlife.



- Biologic Resources: The occurrence of both wetland and upland vegetation, and desert species suggests the breadth of the City's biological diversity. This variety is correlated with a diversity in the number and range of wildlife habitats and wildlife features. Within Calimesa, the importance and value of these habitats is strengthened where two or more habitats and vegetative types converge. There are several sensitive plant and animal species which may be found in Calimesa, including the Fallbrook Spineflower, Stephens Kangaroo Rat, and the California Gnatcatcher. The presence and possibility of these and other endangered species within Calimesa should prompt the City to pursue planning solutions to preserve the quality and diversity of biological resources.
- Viewsheds: Interstate 10 is the regional transportation corridor connecting the Los Angeles metropolitan area with the Inland empire and eastern desert areas. Interstate 10 bisects Calimesa and provides uninterrupted views of the surrounding rolling terrain, valley floors, and panoramic vistas of the more distant San Bernardino and San Jacinto Mountains. Viewsheds of the Yucaipa, Calimesa, and Beaumont communities are also visible from Interstate 10.
- Ridgelines: The City of Calimesa is characterized by foothills in its eastern areas and nearly level topography in its north and central areas. The terrain is gently sloping towards the San Timoteo Creek in the southwestern area of the City. In Calimesa, visual units combine diverse landscape types with topographical features. These resources include the San Timoteo Canyon, Central Valleys, the Northern Plain, Northern Plateaus and Ravines, and the Northern Valley. Conservation of these viewsheds and ridgelines ensures preservation of the City's topographical features, vegetative types and scenic qualities.
- Cultural Resources: The Calimesa area was inhabited by the Pass Cahuilla at the time of Spanish exploration in the late 1700's. The development of mail, freight, and stage lines through the area first stimulated agricultural and land development opportunities, and later commercial enterprise. The City of Calimesa contains archaeological, paleontological and historical resources, which reflect its cultural heritage. These resources could be neglected and destroyed by urban development unless preservation efforts are implemented.
- Open Space Lands: Calimesa has vast open space areas consisting of undeveloped land and land reserved for recreational purposes. Additional open spaces include the Southern California Edison easement, agricultural land, Calimesa Channel and Calimesa Creek, Calimesa Golf Course, and other unimproved stream courses. Approximately 1,274 acres within the Oak Valley Specific Plan area have been planned as natural open space and 351 acres are designated for golf course development.

- Recreation Facilities: Recreational facilities in the City consist of a golf course, a multipurpose senior center, and private school playground facilities. There is a need for additional parks and an integrated trail system to provide additional recreational opportunities for City residents.

## GOALS AND POLICIES

The need to conserve Calimesa's various environmental resources is a challenge that the City constantly faces as each new development is proposed. The goals and policies below address the different conservation and open space concerns in Calimesa, as identified in the RME Profile Report. They include water resources; geologic resources; biological resources; cultural resources; energy resources; agricultural lands; open space areas; parks; recreational facilities; park development; and joint use and coordination. The RME goals and policies addressing these issues will provide a firm direction for the preservation, use, protection, management, and improvement of existing resources in the City.

### Water Resources

**GOAL 1:** Conserve and protect surface water, groundwater and imported water sources.

#### Policies:

- 1.1 Local drainage courses, channels and creeks should be retained in their natural condition, to the extent possible.
- 1.2 Cooperate with Federal, State and County governments and other agencies on the maintenance and improvement of the quality and quantity of local and regional groundwater resources.
- 1.3 Require developments to utilize measures designed to conserve water resources, including the use of low flow irrigation systems and water-efficient plumbing fixtures.
- 1.4 Promote the use of drought tolerant landscaping in new developments, encourage the replacement of existing water consumptive landscaping and review new agricultural uses for water demand.
- 1.5 Encourage the use of reclaimed water for irrigation in parks, golf courses, agricultural uses and industrial uses, as well as for residential and other urban uses, whenever feasible and where legally permitted.
- 1.6 Assist responsible public agencies in eliminating the discharge of toxic materials and untreated sewage into the Calimesa drainage and groundwater system.

## **Geologic Resources**

**GOAL 2:** Conserve and protect significant landforms and hillside areas.

### **Policies:**

- 2.1 Conserve hillsides through limited development on slopes greater than 25% and utilize multiple levels or foundations and smaller building areas as a means of reducing grading.
- 2.2 Require the practice of proper soil management techniques to reduce erosion, sedimentation and other soil-related problems.
- 2.3 Require erosion control measures such as binders, revegetation, slope covers, and other practices which reduce soil erosion due to wind and water.
- 2.4 Discourage the grading of hillside areas through compliance with the City's Hillside Development Guidelines.
- 2.5 Protect the City's scenic and visual resources by limiting ridgeline development and building heights.
- 2.6 Areas with slopes of 45 percent or greater shall not be considered buildable.
- 2.7 The City shall consider the use of a Planned Development zone which would encourage creative site design, in order to preserve significant natural resources, slopes in excess of 45 percent, and assist in creating a site plan which provides an acceptable level of risk protection for future development from the effects of earthquakes and earthquake faults, major drainage flows, landslides, and the like.

## **Biological Resources**

**GOAL 3:** Conserve and protect significant stands of mature trees, native vegetation, and wildlife habitat within the planning area.

### **Policies:**

- 3.1 Conserve and protect important plant communities and wildlife habitats, such as riparian areas, wetlands, oak woodlands and other significant tree stands, and rare or endangered plant/animal species by using buffers, creative site planning, revegetation and open space easements/dedications.



- 3.2 Encourage the planting of native species of trees and other drought-tolerant vegetation.
- 3.3 In areas that may contain important plant and animal communities, require developments to prepare biological assessments identifying species types and locations and develop measures to preserve sensitive species to the maximum extent possible.
- 3.4 Allow new development to remove only the minimum natural vegetation and require the revegetation of graded areas with native plant species.
- 3.5 Work with state, federal and local agencies in the preservation of sensitive vegetation and wildlife in the City.
- 3.6 Protect and maintain sensitive biological habitats by limiting urban development and restricting off-road vehicle use in these areas.

### **Cultural Resources**

**GOAL 4:** Promote cultural awareness through preservation of the City's historical, archaeological and paleontological resources.

#### **Policies:**

- 4.1 Identify, protect, and preserve, where possible, the historical resources of the City.
- 4.2 Increase public awareness of Calimesa's cultural heritage and resources through education.
- 4.3 Require the preservation of identified cultural resources to the extent possible, prior to new development, through dedication, removal, transfer, reuse, or other means.
- 4.4 Seek to protect significant historical sites or structures by offering programs and/or incentives to preserve, restore, or reuse the structures while maintaining their historical significance and integrity.

### **Energy Resources**

**GOAL 5:** Conserve energy resources through the use of current energy conservation practices and technology.

**Policies:**

- 5.1 Encourage innovative building, site design and orientation techniques which minimize energy use by taking advantage of sun/shade patterns, prevailing winds, landscaping and building materials that control energy usage.
- 5.2 Establish, update and implement energy performance requirements established under the California Administration Code Title 24 Energy Conservation and Insulation Regulations.

**Agricultural Land**

**GOAL 6:** Conserve where appropriate, and avoid premature conversion of agricultural lands to urban development.

**Policies:**

- 6.1 Ensure the compatibility of agricultural uses with adjacent urban areas by requiring development to setback adequate distances, provide buffers such as landscaping, earthen berms, or other physical barriers.
- 6.2 Encourage the use of sound agricultural practices to minimize the disturbance of the natural environment while maximizing agricultural production capabilities.

**Open Space Areas**

**GOAL 7:** Seek to provide a network of open space areas to preserve natural resources and to provide visual and physical relief from urban development.

**Policies:**

- 7.1 Seek dedication of contiguous open space lands in order to provide a network throughout the City.
- 7.2 Seek funding sources for the preservation and maintenance of open space areas in the City.
- 7.3 In accordance with the Federal and State Endangered Species Acts, protect and preserve open space areas which serve as endangered plant and animal species habitats and land containing unique geographic features, through acquisition, dedication or other means of preservation.

- 7.4 Encourage open space and quasi-passive recreational uses for areas identified to have hazards relating to floods, earthquake faults, landslides, etc.
- 7.5 Designate City scenic highways and develop guidelines for developments along or adjacent to these highways.

## **Parks**

**GOAL 8:** Whenever possible, utilize less developable lands and existing public lands for parks and recreational uses in order to minimize costs.

### **Policies:**

- 8.1 Allow active/passive recreational uses on designated open space lands.
- 8.2 Manage public passive recreational open spaces to optimize use while avoiding environmental disruption.
- 8.3 Continue investigating acquisition of San Bernardino National Forest property within the planning area for use as a nature park.
- 8.4 Designate park site locations with reasonable service areas on the City's land use plan in order to prevent their conversion to other uses.
- 8.5 Link city bikeway and trails to adjacent regional and local trails networks.
- 8.6 As appropriate and in conjunction with fee owners, designate washes, channels, utility corridors and transportation rights of way as major linkages of the open space/recreation network.
- 8.7 Work with the County of Riverside to explore areas of cooperation regarding bike and equestrian trails within the City.

## **Recreational Facilities**

**GOAL 9:** Develop and maintain recreational facilities as economically feasible, and that meet the needs of all segments of the community for recreational activities, relaxation and social interaction.



**Policies:**

- 9.1 Continue to survey City residents in order to work to meet their desires and needs for recreation.
- 9.2 Provide active and passive park and recreational facilities, based on reasonable service areas within the planning area, to serve the needs of residents of all ages, economic levels and physical conditions.
- 9.3 Encourage the development of private recreational facilities, when appropriate, to increase the recreational opportunities of residents.
- 9.4 Seek to provide 5 acres of parkland per 1,000 residents in the City.
- 9.5 Define additional cultural facilities (community center, theater, etc.) to meet the needs of the community.
- 9.6 Develop a realistic 5-year and 10-year capital facilities plan for parks and recreational facilities.

**Park Development**

**GOAL 10:** Actively pursue all available sources of financing for parkland acquisition and maintenance.

**Policies:**

- 10.1 Develop a Park/Trail Master Plan which identifies planning area needs and maintenance and phasing of park/trail systems.
- 10.2 Seek out and pursue all forms of federal, state, local, private foundation and endowment support to assist in the continuing acquisition, development and programming of park and recreation resources in the City.
- 10.3 Establish a system for parkland dedication and development fees.
- 10.4 Set up a program for the disbursement of park and recreation fees to ensure that fees from a development project are utilized to serve the residents of that project.
- 10.5 Encourage neighborhood groups, organizations, clubs and businesses to take a greater interest and financial responsibility in the improvement of the park and recreation

system in the City through the donation of land, equipment, services and/or financial support.

- 10.6** Set up a program to encourage private individual endowment of specific recreational needs.

### **Joint Use and Coordination**

**GOAL 11:** Utilize opportunities for joint use of public facilities for recreational purposes such as schools, flood control channels and land areas under the jurisdiction of other public agencies.

#### **Policies:**

- 11.1** Develop cooperative programs with the school districts and other agencies where the joint use of facilities would lead to increased/ enhanced facility utilization.
- 11.2** Develop programs for special populations (seniors, disabled, teens, etc.). Joint planning of such programs should be coordinated with other service providers.
- 11.3** Coordinate with the Yucaipa/Calimesa and Beaumont/Banning School Districts in the location of future elementary and junior high school sites to allow for adjacent park acquisition and subsequent park/school complexes.
- 11.4** As the City acquires and develops parks and recreational facilities, evaluate the need for a joint powers agreement with the City of Yucaipa at Calimesa Park.
- 11.5** Evaluate the current adult programs and classes offered by Crafton Hills Community College and the school district's adult programs to determine if there is any duplication and to identify opportunities for shared programs and overall cost savings.
- 11.6** Evaluate the types of programs offered by the County of Riverside to eliminate duplication.
- 11.7** Coordinate with the County of Riverside in providing regional recreational facilities in the area.

### **RESOURCE MANAGEMENT PLAN**

The earth's resources are limited and many of these resources are non-renewable. The proper conservation and managed use of these resources allow for their maximum utilization and continued availability for future residents. Water, soil, agricultural land, and historic resources are limited in

supply and conservation practices are necessary to ensure their availability. Plant and animal communities and their habitats need to be protected to maintain ecological balance. Open space areas once developed, cannot be returned to their natural condition and thus, must be preserved. Parks and recreational facilities provide opportunities for leisure, enjoyment and relaxation. The scenic qualities of the community are often provided by viewsheds to natural landforms and open spaces. Resource management is concerned with the protection of the area's resources from neglect, destruction, depletion or obstruction. At the same time, it affords the City with maximum benefit from the presence of natural resources in the area.

The Resource Management Plan of the City contains three major components: the conservation of natural resources, the provision of open spaces, and the provision of parks and recreation facilities. Conservation deals with soil resources, groundwater resources, vegetation and wildlife, scenic highways, visual resources, and cultural and historical resources. The City's conservation plan provides a citywide approach to the utilization, conservation and management of these resources. It includes a program for the preservation of significant resources and standards for development in areas with identified resources. Open space and recreation addresses parks and recreation facilities, walking, multi-purpose, and equestrian trails, park development and the joint use of public facilities. Guidelines for overall development of recreation opportunities in the City and standards for park development are outlined in the open space and recreation plan.

### **Conservation Plan**

The conservation of natural resources in the Calimesa area include identification of significant resources, development of conservation programs and establishment of standards for conservation or protection. The location of identified resources in Calimesa generally corresponds with those areas where development has not disturbed or obstructed access to the resources.

The conservation of soil resources, including agricultural land is necessary to protect areas unsuitable for development and preserve the visual quality afforded by the landscape. The Calimesa Hills and the San Timoteo Badlands, which partially frame the flatter central areas of the City consist of steep, rocky hillsides. In addition, the Department of Conservation has identified prime farmland, locally important farmland, and grazing land within City limits. Both steep terrain and the identified farmland should be preserved against development forces.

The City is working to protect water resources. Local water resources are part of an area-wide groundwater system. Because the City derives its water supply from wells in the Calimesa area, it is important that groundwater resources are not overdrafted or depleted. Local groundwater resources can meet the City's water needs. Although, conservation programs and measures will prevent future water shortages caused by drought, overdevelopment or excessive water waste. Water conservation programs have been developed in the City to promote the use of reclaimed water for landscaping and irrigation of public facilities and rights-of-way.



The City of Calimesa is also concerned with protecting the groundwater resources from contamination and other forms of destruction which will prevent their availability for domestic uses. Contamination may be posed by agricultural and industrial operations, and other activities involving hazardous materials. Programs to protect the groundwater supply from contamination have to be established.

The protection of plant and animal communities in Calimesa applies to undeveloped areas where sensitive biotic communities and viable habitat exist. Preservation of these areas as open space is of great importance in retaining the wealth of plant and animal species in the City. Open space refers to areas left vacant and undeveloped to allow biological resources to exist and thrive. Although most undeveloped areas are owned by private individuals and groups, the City of Calimesa can closely regulate the type and amount of development which can occur. To assist in preservation of sensitive ecological habitats, the City of Calimesa will also explore funding sources and other ways to acquire the most ecologically sensitive areas. It shall also promote the preservation or replanting of native vegetation. Agricultural land, major drainage channels and open space areas which may contain sensitive biological resources are shown in Exhibit 4-1.

Development plans have been proposed for some of the City's undeveloped areas, including the Oak Valley area west of Interstate 10. The City will actively pursue the preservation of the biological and cultural resources. This may include the dedication of land for open space, the transfer of cultural resources, or the provision of similar wildlife habitat in other areas. Plant and animal communities may also be re-established by encouraging residents to use native plant materials and drought tolerant vegetation. These landscaping practices conserve water and expand plant and animal habitats in the City.

The City's flatter terrain affords views of the larger San Gorgonio Pass area and the San Jacinto Valley area. In a local context, Interstate 10 and local roads offer viewsheds of the Calimesa Hills and the numerous canyons, ridges, and ravines composing San Timoteo Canyon and Badlands areas. Preserving viewsheds of natural landforms and significant ridgelines will retain the rural setting of the City. The City shall regulate the scale and density of new development to preserve these viewsheds and ridgelines.

Several historic mail, road, and rail transportation routes were developed near Calimesa, as Spanish explorations and early settlers established paths through the San Gorgonio Pass area. Historic resources in the City include remnants of early settlements which add to the rural character of the City. The City will evaluate ways to preserve historic resources and increase cultural awareness.

The San Timoteo Canyon and Badlands areas supported prehistoric plant and animal life, as paleontologic evidence suggests. In more recent times, this setting was used by native Americans. Although a limited number of paleontologic and archaeologic sites have been identified, there is a high probability that additional sites have yet to be uncovered. Because such sites offer a wealth of







knowledge in reconstructing historic events, the City will also focus conservation efforts on preserving these resources. Exhibit 4-2 shows scenic and cultural resource areas.

**Development Standards:** In working towards the conservation of natural resources and the preservation of areas with significant resources, conservation efforts will be made according to the sensitivity of identified resources. They will be focused on areas with high sensitivity and where city programs will have the greatest impact on the conservation of natural resources. Exhibits 4-1 and 4-2 delineate significant resource areas in the City where aggressive measures to promote preservation and the continued availability of resources will be focused. Proposed development within these areas shall include additional resource evaluation during project review. Identified resources shall be preserved to the extent possible. The degree of evaluation will depend upon the sensitivity of the area as discussed below.

- Low Sensitivity. Development in areas with low sensitivity are not required to provide special studies to ascertain the presence of a significant resource. In Calimesa, areas with no significant resources or where past development has destroyed or significantly altered the presence or availability of resources are considered to have *low sensitivity*. They also include areas where past investigations have uncovered no important resources. The developed areas are concentrated in the north central portion of the City and are considered to have low sensitivity.
- Moderate Sensitivity. Areas with low density developments where natural resources may still be present or may be utilized and areas adjacent to identified cultural and ecological resources are considered to have *moderate sensitivity*. Areas which have not been subject to past studies and where sensitivity is unknown shall also be considered to have moderate sensitivity, until more information is available to classify these sites. Increases in human activities or additional development intensity in these areas can disturb or destroy existing natural resources or prevent future access and use of these resources. Areas with moderate sensitivity include the areas surrounding the Calimesa Hills and other undeveloped land serving as parks, the flood control channel, and providing viewsheds. Development in areas with moderate sensitivity shall be subject to detailed analysis and shall incorporate measures to prevent resource destruction when they are discovered during grading, excavation and construction activities. According to the findings of the analysis and site preparation activities, the area shall be reclassified as either having low or high sensitivity.

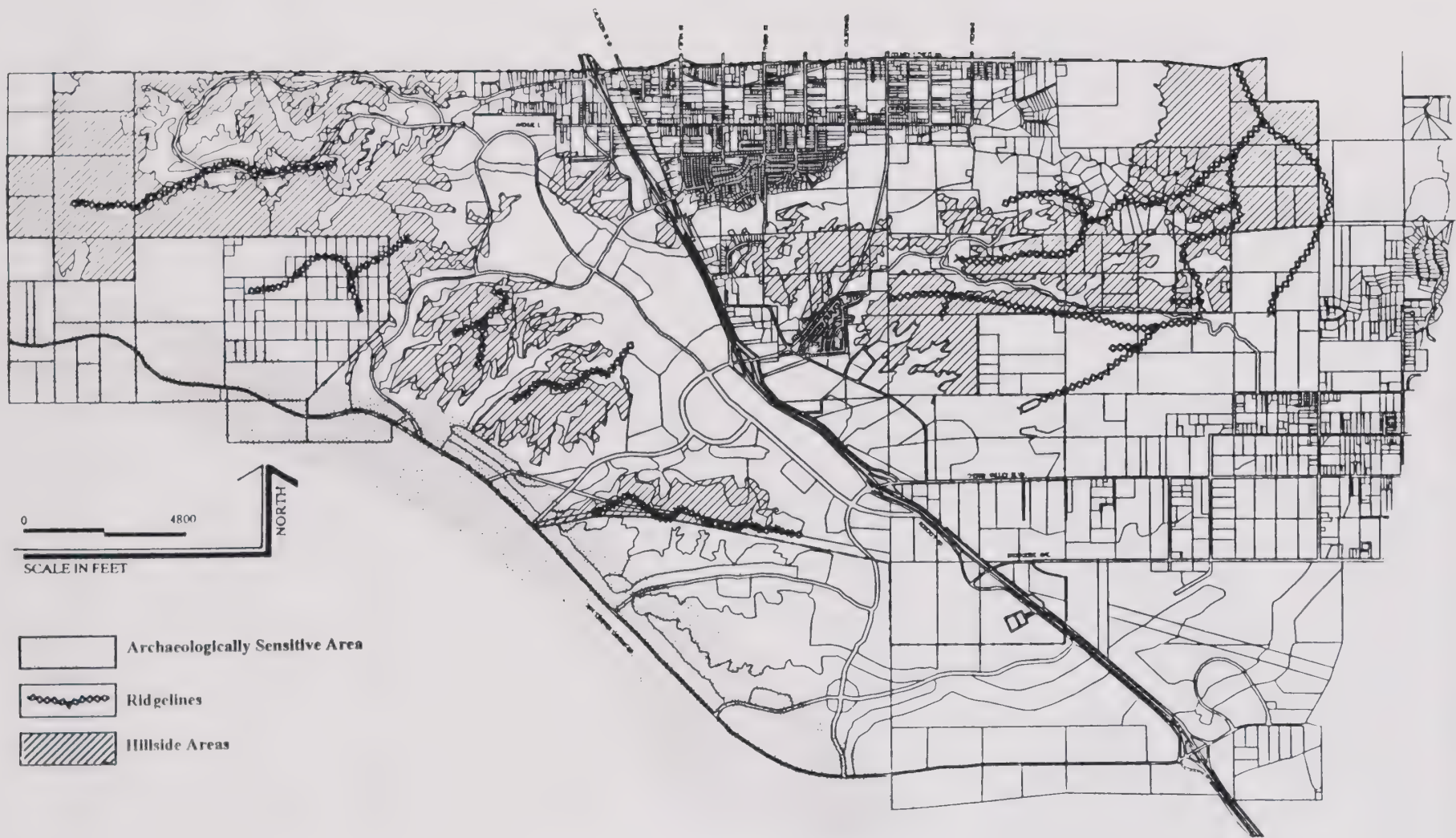
- High Sensitivity. Areas with ecologically sensitive resources are those where studies or activities have identified the presence of a significant amount or important natural resource; or represent undisturbed areas that have a very high potential for the presence of natural resources. These areas have *high sensitivity* and are the primary targets for conservation and preservation. They include the steep slopes of the Calimesa Hills, Oak Hills, Singleton Canyon, San Timoteo Canyon, and other canyons in the City; important agricultural lands; hilly terrain and areas of riparian habitat where sensitive plant and animal communities exist; cultural resources identified within the San Timoteo Canyon; Calimesa Creek, other intermittent streams, and their watersheds; hillside, canyon and ridgeline areas; and other areas where resources are likely to be uncovered in the future. Development in these areas shall be subject to an in depth review through the provision of special studies focusing on the resource sensitivity. The studies shall be required prior to development and shall include feasible measures to protect and preserve the resource(s).

Conservation does not necessarily mean the prevention of development and keeping the areas vacant. There are several ways to protect natural resources or to keep them available for new development. By providing development standards for areas with moderate and high sensitivity, the City of Calimesa can achieve a balance between protecting its natural resources and providing for the needs of its residents.

Aside from the preservation of resource areas, there should be controls on development. Some land within the City is committed to the provision of public facilities, but the majority of land is in private ownership. Urban development in moderate and highly sensitive areas must be reviewed for its impact on the presence and availability of natural resources. The following standards should apply to development within areas of moderate and high sensitivity for ecological resources:

- Field surveys and investigations must be made prior to development approval, to identify potential natural and cultural resources.
- Trustee agencies and local environmental groups should be consulted to insure the project and site review is thorough.
- Development should be sensitive to significant natural resources located onsite or in nearby areas.
- Identified resources shall be kept undisturbed, removed for relocation, or incorporated into the design of the project, depending on the resource and the best way of preservation.









- Development in areas with geologic and seismic hazards shall be prohibited when the hazards cannot be mitigated or eliminated by construction methods.

### **Open Space and Recreation Plan**

The City's open space and recreation plan will preserve open space areas and provide for new and expanded recreational facilities. Open space is preserved to allow for the natural management of watershed areas, the prevention of erosion, the provision of recreational opportunities, the preservation of wildlife habitats, pollution abatement, and visual and aesthetic qualities. In Calimesa, urban development is most established in the north central portion of the City. Hillsides and open space areas frame this urban development and give the City a rural atmosphere. Small vacant lots within residential neighborhoods could serve as mini parks and would be directly accessible to the residents they serve. Large vacant lots should be investigated for their potential to expand the number and variety of recreational opportunities in the City.

The Calimesa Hills and the San Timoteo Canyon area comprise the major open space resources in the City. These landforms are preserved as open space because they provide for watersheds, wildlife habitats, erosion control, and visual values. Future development within the Calimesa Hills and the San Timoteo Canyon shall be restricted and be required to be sensitive to the steep terrain, seismic risks and other potential hazards such as wildfire, landslides, and liquefaction. Preservation of these landforms will also maintain the City's scenic qualities.

Recreational facilities and open space can be made available through dedication from private ownership (Quimby Act) or from the direct purchase of suitable land. The City of Calimesa establishes the following guidelines for the acquisition of open space:

The highest priority for acquisition should be given to those open space and natural resources sites which are:

- Subject to development in the near future which can irreversibly destroy its open space value.
- Recognized as having significance due to its unique ecological or cultural resources, as identified by the scientific community.

The next level of priority should be accorded to:

- Large open space areas which give form and identity to the community.  
or

- Areas which would, by its preservation, complement the efforts of other agencies or individuals in preserving open space in the City, or
- Areas adjacent to preserved open space areas.

As population growth and new development occurs, the need for parks and recreational facilities increases. Park development should be pursued to meet the recreational needs of all the residents. The City's standards for park development to ensure adequate facilities are available and all interests are served include:

- Provision of at least 5 acres of parkland per 1,000 residents.
- Proximity of existing and planned residential developments to park sites.
- Park facilities should have direct street access, available parking areas and utility connections.
- Retention and maintenance of existing park facilities.
- Availability of school recreational facilities for public use.
- Development of a variety of recreation opportunities and park facilities.
- Play equipment, benches, and picnic tables shall be made of recycled materials, where feasible.

### **Classification of Parks**

Parks in the City of Calimesa shall be developed to provide a variety of recreational opportunities and experiences. They shall include facilities that are convenient, accessible and safe and those that will serve the interests of the majority of residents. The City shall seek to develop the following parks in Calimesa:

#### ***Passive Parks***

- Passive parks should contain a minimum of 10,000 square feet.
- Play equipment, if any, should be low maintenance, made of steel or aluminum, with little or no wood surfaces. Benches and picnic tables should be made of concrete.



- Any sand play areas should cover no more than 20% of the entire park space.
- There should be turf seating areas and concrete sidewalks.
- There should be an abundance of deciduous shade trees and a non-view obscuring steel fence, at a minimum, around the perimeter in areas which abut residential uses.
- Water fountains, barbecue pits or any other high maintenance amenities should be minimized or prohibited.
- When part of a residential project, passive parks should be accessible to the entire project to which they adjoin.
- Open space and/or greenbelt areas can be included in the passive park designation whenever appropriate, as determined by the Parks and Recreation Commission.

### ***Neighborhood Parks***

The following general standards should be used for the development of neighborhood parks:

- Neighborhood parks should be located within a one-mile radius of park patrons.
- Neighborhood parks should range in size from 5 to 20 acres.
- A neighborhood park should include the following facilities:
  - Tot lots;
  - Picnic areas;
  - Playing fields (baseball/softball, football, soccer, etc.);
  - Courts (basketball, volleyball, tennis, etc.).

The type and number of facilities located in a neighborhood park shall be subject to review and recommendation by the Park and Recreation Commission.

- When possible, neighborhood parks should be considered for location adjacent to school sites to take advantage of the joint use of the recreation areas of the schools.

- Facilities should be designed to conserve resources, including water and power, whenever possible.
- Lands included within a neighborhood park shall not include slopes in excess of ten percent provided, however, that lands with slopes in excess of ten percent may be included within a neighborhood park if prior to dedication, a determination is made by the Park and Recreation Advisory Committee that such lands would serve a recreational purpose or are not counted toward the total recreation area required.
- Improvements and facilities in developer-dedicated neighborhood parks, other than those of a specialized recreational nature, i.e., recreational buildings, shall be made and constructed by the developer, or when a fee is paid in-lieu of dedication, the fee should be sufficient to meet and provide the City specified requirements.
- Access to neighborhood parks should emphasize alternative modes of transportation other than the automobile (pedestrian paths, bicycle trails, etc.).
- The service area of a neighborhood park should not be divided by natural or artificial barriers such as major thoroughfares, railroads, freeways and major water courses.

### ***Community Parks***

In keeping with the City's growth and changing recreational needs, continuous research and assessment of community park facilities will be conducted to ensure that the needs of the community are met. Additional community park sites may be needed to serve the recreational needs of the community.

The following general standards should be used for the development of community parks.

- In areas of residential development, community parks should be located to serve a population of within a three mile radius.
- Community parks should be a minimum of 20 - 100 acres in size.
- Community parks should include the following facilities:
  - Competition size swimming pools
  - Playing fields (baseball/softball, football, soccer, etc.)

- Courts (basketball, volleyball, racquetball, tennis etc.)
- Picnic areas
- Community recreational center which provides meeting and other facilities.
- Equestrian facilities, if appropriately located
- Amphitheater

The type and number of facilities located in a community park shall be subject to review and recommendation by the Park and Recreation Commission.

- When possible, community parks should be considered for location adjacent to school sites.
- Design of community parks should make every attempt to conserve resources, including water and power whenever possible.
- Access to community parks should be provided by alternative modes of transportation, in addition to the automobile.

### ***Nature Preserves***

Nature preserves provide natural, undeveloped land for passive recreational use such as hiking, bird watching and enjoyment of the scenery and wildlife.

### ***Private Recreation***

The Calimesa planning area will also contain some privately-owned parkland and facilities within a development for the exclusive use of the development's residents. These facilities and parks, are typically maintained by a home owners association. Private parkland represents a component of the City's parkland system, however, they are not a significant portion and should not be credited against the dedication of public parkland or related fees. Private recreation facilities that charge user fees (such as golf courses, sports clubs, etc.) may also be developed to expand recreational opportunities for residents of the area.

### ***Open Space Linkages***

Open space linkages are usually linear strips of open space along lands such as easements and floodplains. The purpose of these linkages is to connect open space areas and parkland through open space corridors. Pedestrian and bicycle or equestrian trails are usually located within open space linkages. The Calimesa planning area has open space linkages by public utility easements, golf courses and mountainous areas. These open space linkages form an important component to the



Open Space and Recreation Plan as they provide the backbone to the overall open space system. Exhibit 4-3 shows existing, planned and needed parks in the City.

Aside from parks and recreational facilities, the City shall work for the development of a system of appropriately located and maintained pedestrian/equestrian trails. The City's proposed trail network is shown in Exhibit 4-4. The trail system connects parks and open spaces, commercial corridors, and provides linkage to regional trails. Trails should be developed to capitalize on views of the area's canyons, ridgelines, and hillsides. Trail markers should be provided along the trails to identify the trails and significant views or vistas.

Typical bikeway cross sections are shown in Exhibit 4-5. Pedestrian/equestrian trails should be developed according to existing conditions and following the guidelines below:

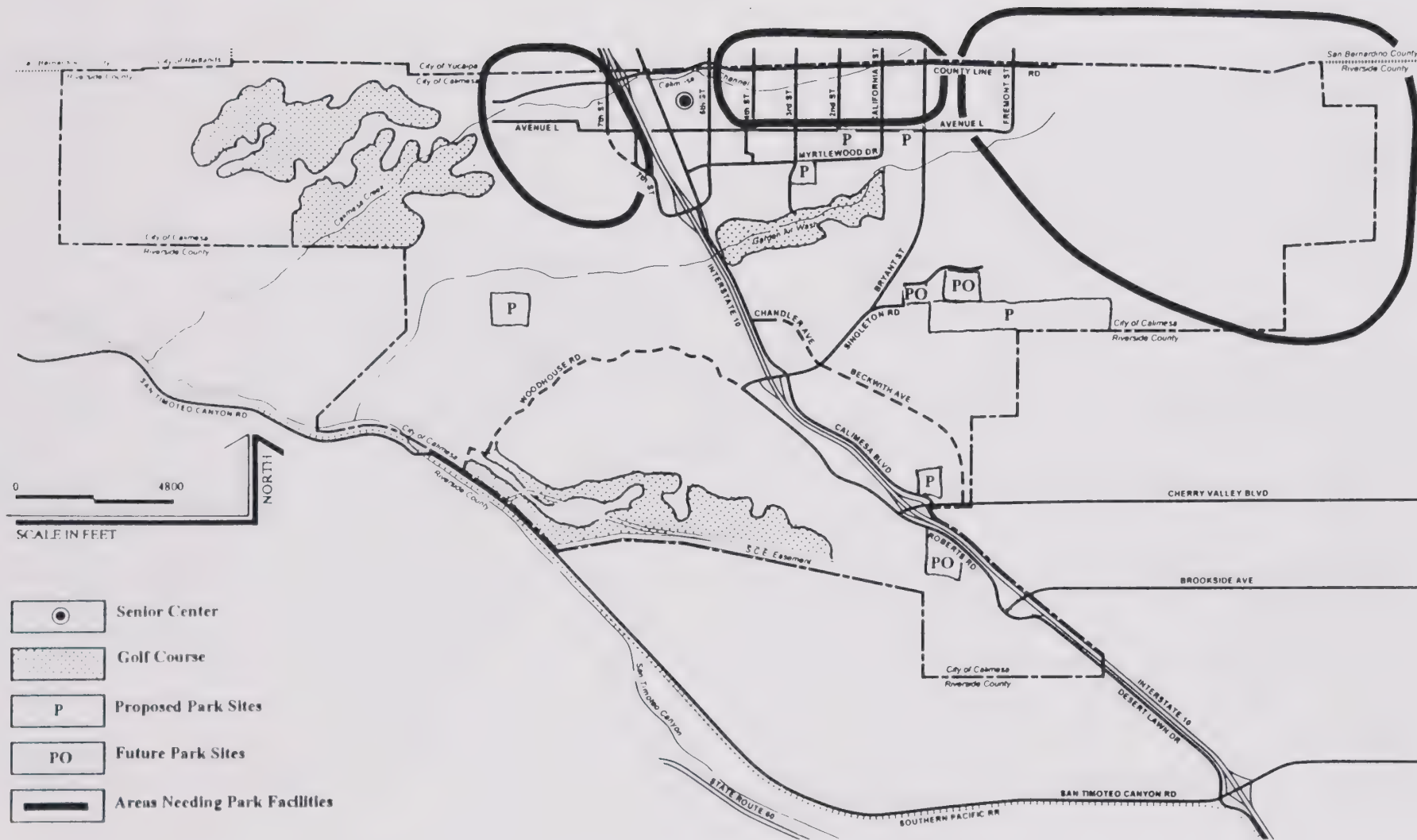
- Trails shall be maintained to a minimum width of 8 feet with an average grade of 15 percent or less. Steeper grades shall be allowed for segments of 200 feet or less.
- Whenever possible, along community trails, trees and landscaping should be provided adjoining the trails. The trees should conform to street tree standards, be low maintenance and drought tolerant.
- Trails shall be maintained on native soil surfaces where feasible and located along natural, physical features wherever possible.
- Rest areas with benches, bicycle stands, hitching posts, watering facilities, drinking fountains, and restroom facilities should be provided at strategic locations along the City's trail system.
- Wheel chair access, where appropriate and feasible, shall also be provided along the trail system.

## **IMPLEMENTATION PROGRAMS**

Specific measures have been identified to implement the City's conservation, open space, and recreation plans. These include existing and new programs that would be undertaken by City staff to achieve the goals and policies of the Resource Management Element.

### **1. Water Quality Protection**

The South Mesa Water Company, the Yucaipa Valley Water District, and other area water companies monitor water quality at local groundwater wells in Calimesa. These wells are regularly checked to determine if groundwater quality is acceptable for municipal and domestic purposes. Groundwater

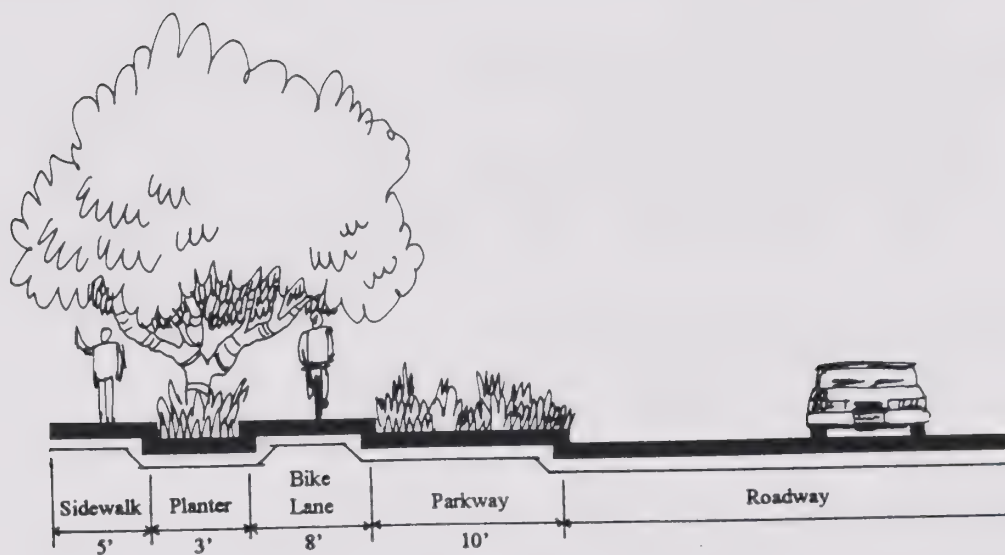




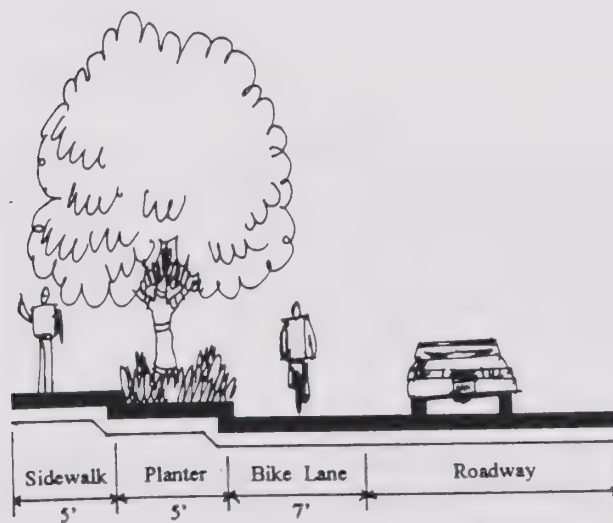








Class I Bikeway



Class II Bikeway





monitoring provides a means for the early identification and correction of water contamination. The City shall coordinate water quality monitoring by the South Mesa Water Company and the Yucaipa Valley Water District and suggest corrective measures when necessary.

The City shall develop guidelines for storm runoff discharge, to comply with the National Pollution Discharge Elimination System and the County Public Works Standards. These may include regulation of runoff from construction activity, regular street sweeping, use of storm drain grates, monitoring of industrial and commercial waste discharge into local water streams and drainage channels, controlling the use of pesticides, fertilizers, septic tanks, and other hazardous materials which may percolate into the groundwater.

The City shall work with the two water companies, the San Bernardino Valley Municipal Water District and the San Geronio Pass Water Agency in developing a groundwater recharge program for the area. This may include designation of water retention areas and the import of water for recharge purposes.

The City shall promote the preservation of water courses in their natural state. This shall include maintenance of creeks and channels to keep them free of flood water obstructions such as debris and vegetation; use of detention basins; wider setbacks along creeks rather than provision of concrete channels, etc. The City shall consult with the Department of Fish and Game and the US Fish and Wildlife Service, regarding the preservation of surface water resources in the City.

## **2. Water Conservation Ordinance**

Water conservation efforts in Calimesa are promoted by its Water Conservation Ordinance. This ordinance encourages the use of drought-tolerant vegetation to decrease the need for watering yards, landscaping and open fields. The City should continue to promote the use of drought-tolerant landscaping, to complement the existing turf reduction requirements. The City shall explore the use of reclaimed water for the irrigation of recreational facilities and public rights-of-way, if they will not pose any threats to public health and safety. This may include provision of incentives to developments which utilize reclaimed water.

It shall require the use of water efficient plumbing appliances in new developments and city facilities. Public information campaigns and brochures describing additional water conservation measures have also proven effective in reducing water consumption. They shall be made available at City Hall, the Library and the Senior Center.

The City shall coordinate this program with the water conservation programs of local purveyors (Yucaipa Valley Water District and South Mesa Water Company).

### **3. Hillside Development Guidelines**

Development on hillside areas is regulated by the City's Hillside Development Guidelines. The standards set forth in the guidelines limit the grading and density of development on hillside areas and ensure that geologic hazard areas, natural resources and fire protection are considered in site planning for hillside developments.

The guidelines encourage lot size development which corresponds with the slope of the site. Uniform lot size is discouraged in areas with a 15 percent or greater slope. Contour grading is encouraged. Development and grading is prohibited within 75 feet of any water body identified for preservation, in geologically hazardous areas, in environmentally sensitive areas, in visually significant areas, and in flood hazard areas.

The maximum height for cut and fill slopes on individual lots is 12 feet. "Difficult lots" may exceed this height when a grading and planting plan is submitted by a landscape architect and the project is reviewed by the Planning Commission and City Council. Maximum grade for cut and fill slopes shall not exceed 2:1, preferably 3:1 for fill slopes.

The City shall continue to implement hillside development guidelines for development in hillside areas.

### **4. Ridgeline Development**

The City shall develop standards for ridgeline development which will preserve significant ridgelines in the City. This shall include the location of structures below the ridgeline, limits on building heights to one story for hillside development, provision of landscaping for development which will affect ridgelines, etc. The City shall require viewshed studies which will show how the proposed structures will affect the ridgeline. The studies shall provide views from various sites around the city, in reference to the project site and the surrounding ridgelines. This study will be used by City staff in evaluating if the project will substantially or detrimentally alter the existing ridgeline or if there are ways to prevent impacts on the ridgeline.

As development in the hillside areas occurs, the City shall refine Exhibit 4-2 to delineate a more precise area or distance from the ridgeline, where development will be required to comply with the established guidelines.

### **5. Agricultural Land Preservation**

The City shall encourage continued agricultural uses in the area by providing setbacks from urban development and incentives to maintain existing agricultural uses. It shall encourage participation in the Williamson Act whereby tax rates can remain or revert to lower rates as long as the land is in agricultural use. It shall coordinate with agricultural property owners and the Department of



Agriculture in the use of new technology for crop management and dust and pest control. The City shall review environmental and economic impacts of agricultural land conversion to urban uses.

## **6. Biological Resource Surveys**

Several sensitive and endangered plant and animal species, as well as quality biotic habitats have been identified in Calimesa. Urban development can disturb or remove these habitats, and thus influence the viability of sensitive species to survive and thrive. The City shall require site specific biological assessments prior to development to ascertain the presence of sensitive, rare, threatened and endangered plants and animals on site, especially in areas that serve as habitats for sensitive species.

It shall consult with the Department of Fish and Game and the U.S. Fish and Wildlife Service on their concerns for identified biological resources, as well as compliance of development with state and federal regulations for conservation of sensitive plant and animal species. The City shall maintain a list of sensitive plants and animal species for use as reference in evaluating developments which would occur in wildlife habitat areas.

The City shall encourage developers to preserve areas with sensitive biological resources through dedication of open space, habitat preservation and/or restoration, and other ways to prevent human and urban use destruction of these resources. It shall prevent disturbance of sensitive habitat along trails and bikeways and restrict development and off-road vehicle use in areas identified to have sensitive biological resources.

It shall refine its biological resource map through designation of natural habitats and ecologically sensitive zones, as well as designating areas where no sensitive species have been found (areas with urban development).

## **7. Landscaping Guidelines**

The City shall develop landscaping guidelines which incorporate the use of drought tolerant vegetation and native vegetation. The guidelines shall be designed to preserve existing mature trees and native vegetation to the extent possible, as well as the planting of trees and native vegetation with urban development. The preservation or replanting of mature trees shall be encouraged in new development, along with the restoration of degraded habitats for native plant and animal regeneration. This will help maintain the rural atmosphere of the City, reduce water consumption, and minimize disturbance of wildlife habitats and ecological cycles.

The landscaping standards shall include the planting of street trees in accordance with the City's list of recommended street trees; landscaping of exposed slopes and graded areas within two weeks of grading; provision of water conserving irrigation systems; use of fire retardant vegetation on steep slopes and fire hazard areas; and other standards on size, type, and minimum landscaped areas.

## **8. Environmental Review**

The California Environmental Quality Act (CEQA) is a state law that was adopted to protect the quality of the environment. CEQA requires all new development projects to be subject to environmental review and an environmental impact report (EIR) be prepared for projects that may have a potential for significant environmental impacts. The EIR identifies the environmental setting, potential impacts, and mitigation measures to avoid or reduce the impacts on any or all of the following 20 issue areas:

- |                     |                       |                      |
|---------------------|-----------------------|----------------------|
| ■ Earth and Geology | ■ Risk of Upset       | ■ Public Services    |
| ■ Air Quality       | ■ Light & Glare       | ■ Energy             |
| ■ Water & Hydrology | ■ Land Use            | ■ Utilities          |
| ■ Plant Life        | ■ Natural Resources   | ■ Human Health       |
| ■ Animal Life       | ■ Population          | ■ Aesthetics         |
| ■ Noise             | ■ Housing             | ■ Recreation         |
|                     | ■ Traffic/Circulation | ■ Cultural Resources |

Environmental review must also consider cumulative and growth-inducing impacts and alternatives to the project. The City shall comply with the requirements of the California Environmental Quality Act (CEQA) and conduct an environmental review of all projects prior to any development approval.

Amendments to CEQA have required a monitoring and reporting program for ensuring compliance with mitigation measures in an EIR. The mitigation monitoring programs provides greater accountability for compliance with the mitigation measures. The City shall ensure that after environmental review the identified mitigation measures are made conditions of approval for the project and the responsibilities of monitoring are assigned.

## **9. Environmental Regulations**

Environmental quality is a world-wide concern and there are numerous laws by state, federal, and local agencies that promote environmental protection and ecological balance. The City shall enforce laws on environmental protection and pollution control within its jurisdiction. It shall consult regulatory agencies on relevant regulations for proposed development and activities in the City. It shall require proof of compliance with these regulations from developers prior to project approval.

## **10. Energy Conservation**

Title 24 of the California Administrative Code outlines insulation and energy conservation standards for new development. A number of other energy conservation practices and design features are recommended by state and local agencies and utility companies. The City should enforce state laws on energy conservation design and appliances.

Natural gas and power companies have developed energy conservation designs and measures and offer free consultation services to developers and users. The City of Calimesa can take advantage of these services by initiating contact between local utility companies and developers during the review process. It shall encourage developers to consult with local utility companies on possible energy conservation measures to incorporate into new developments. There are rebate programs, experimental homes, museums, free audits and a host of other services to help conserve energy.

There are available brochures and informational material from utility companies that explain the need for energy conservation and the different ways this may be achieved. The City of Calimesa should obtain copies of energy conservation brochures and make them available at City Hall for residents and developers. The City should explore with public utility companies the feasibility of retrofitting City facilities for energy-efficient appliances. It should require the use of the most cost-effective energy-saving equipment, heating and lighting in all new City buildings, considering installation, operating and maintenance costs. The City should also encourage the use of passive solar design systems.

## **11. Cultural Awareness Program**

Developments in areas which have not been subject to prior cultural resource surveys shall be required to perform surveys and submit their findings to the City. When resources are identified, appropriate testing, preservation, mitigation or salvage shall be carried out prior to grading or excavation activities. The City shall use these surveys to refine its cultural resource map. The map shall be used as a guide for requiring future surveys and studies as part of proposed development or redevelopment.

The City shall undertake a city-wide survey of historical structures. It shall identify local landmarks and work with various agencies and organizations for the preservation of these structures and sites. The City shall also develop guidelines for the alterations, demolition, or renovations of these structures.

It shall require qualified archaeologists or paleontologists to be present during the excavation of sites which have a high potential for archaeological or paleontological resources. Removal of fossils, indian remains, or archaeological artifacts shall be made in compliance with state regulations. The City shall consider prohibiting development when impacts to cultural resources cannot be mitigated. It shall set up a procedure by which uncovered archaeological and paleontological resources will be removed and transferred for preservation at a local educational and scientific facility for research or display. It shall promote cultural awareness through newsletter articles, landmark identification, educational programs, field trips, and cultural events.



## **12. Open Space Acquisition**

The extent of undeveloped areas throughout the City provides numerous opportunities for open space, trails and parkland development. However, it is unlikely that these areas will remain as such without active programs for open space acquisition. Therefore, public and private acquisition measures should be evaluated to preserve land for natural open space. Land dedications shall be encouraged for areas containing sensitive biological habitats and cultural resources; land which make up significant ridgelines; and land which contains geologic and seismic hazards which cannot be mitigated.

By promoting contiguous open space areas, there will be greater biological viability for existing plant and animal species. The City shall set guidelines for the use of dedicated open space areas, so as not to destroy their value and natural characteristics. Uses which shall be regulated include off road vehicle use, camping, excavation, large spectator events, and the like.

The City shall continue to investigate the possibility of acquiring land adjacent to the San Bernardino Forest for use as nature parks.

The City shall also explore potential funding sources for the acquisition of open space. This may include federal and state funds, as well as private donations and funding from interested organizations. It shall designate these open space areas on the Land Use Map to prevent their conversion to other uses.

## **13. Parks Master Plan**

The City shall undertake a survey to identify the park and recreational needs of existing residents and develop its parks and recreational programs to meet these needs. With the findings of the study, the City shall prepare a Parks Master Plan which identifies the needed parks and recreational facilities in the City. The Plan shall develop ways and identify future sites which would allow for the provision of at least 5 acres per thousand residents in the City. It shall provide for a full range of recreational opportunities and experiences to residents and visitors alike. Park size shall be proportionate to the population concentration of the area it serves. They shall also be designed to be accessible to the disabled and other persons with special needs.

The Parks Master Plan shall provide for a variety of parks in the City, as discussed in the Open Space and Recreation Plan. The Parks Master Plan shall be consistent with the open space network of the City. The City shall prioritize the implementation of this plan, with development of parks in areas with the greatest need. Maintenance of parks and recreational facilities shall be made part of the City's operations.

The City shall explore funding sources for new park development. These may include a land banking program, land dedication and developer fees, state and federal parkland acquisition funds,

private donations, and other public, private and non-profit agencies that are involved in land acquisition and preservation programs. There are vacant lots owned by public agencies and private parties which may be suitable for park development. The City should identify these sites and examine the feasibility and advantages for park and recreation uses at the sites. The City should negotiate with public agencies and private parties on the acquisition of available surplus land for potential park use.

The City shall continue to provide a variety of recreational programs for its residents. These include classes, sports, arts and crafts, and other educational and recreational programs that cater to the interests of the residents in the City.

#### **14. Bikeways and Trails Development**

The City shall develop and maintain a system of bikeways and multi-purpose trails. The trails shall connect to the regional trail system of the County of Riverside, as well as to trails in Yucaipa and Beaumont. It shall utilize existing rights-of-way as provided by roadways, parkways, utility easements (SCE right-of-way), drainage channels, etc. Equestrians, hikers, joggers, cyclists, and walkers shall be encouraged to use these trails through regular maintenance, signage, and newsletter articles.

#### **15. Scenic Highways**

The City shall designate scenic highways and provide signs and guidelines for development along these highways. The standards shall include compatibility with existing developments and the natural environment, protection of views, limits on outdoor advertising and signs, roadside landscaping, minimal grading and excavation, undergrounding of utility lines, architectural integrity of structures, etc.

Developments along these highways shall then be reviewed for compatibility with the scenic resources prior to approval.

The City shall maintain these scenic highways for outdoor recreation experience for travellers and hikers. It shall solicit state, county and private funding for the maintenance of these highways. Trails and bikeways shall be incorporated into the scenic highways.

#### **16. Park Fees**

In accordance with the Quimby Act, the City of Calimesa collects park fees for the acquisition and development of parks to serve new and existing developments. It allows the City to provide park facilities as housing development occurs. The City shall continue to collect park fees from new development for the provision of park facilities to serve that development.



## **17. Private Recreational Facilities**

The City requires the provision of private open space areas in high density residential developments. These areas may include landscaped areas with barbecue pits, playground equipment, picnic facilities, swimming pools, or recreation rooms. The City shall continue to require private recreational facilities within proposed high density residential projects.

## **18. Joint Use of Facilities**

Joint use refers to utilizing a facility to serve more than one purpose or activity. For example, a structure used for commercial operations during the daytime hours, can be used for serve educational purposes during the evening hours. Negotiations between the City and private enterprise, or between the City and adjacent municipal agencies may be necessary to facilitate joint use. This will lead to lower costs for park provision. Thus, the City needs to coordinate its programs with other agencies to address the needs of Calimesa.

The City shall establish agreements with the Yucaipa-Calimesa Joint Unified School District and the Beaumont Unified School District for future recreational facilities, if appropriate. Agreements should include the provision of public recreation facilities near or in school grounds to allow for joint use. Coordination with other privately operated recreational sites in the City (for example, private schools and day care centers) will provide maximum utilization of available facilities. It shall also work with the County of Riverside and adjacent cities to provide recreational opportunities to area residents, while minimizing the duplication of services.

## **19. Inter-Agency Coordination**

Regional environmental issues affect not only the City of Calimesa, but encompass a larger area. These include water resources, energy, air quality, growth, transportation, earthquakes, and other environmental concerns. A number of State, federal and special agencies deal with these issues. The City shall cooperate with the State Department of Water Resources, the County Department of Public Works, South Coast Air Quality Management District, Environmental Protection Agency the Deer Management Coordination Group (San Bernardino National Forest, Bureau of Land Management and California Department of Fish and Game), and other responsible agencies in the enforcement of laws regarding water quality, biological resources, energy use, and other environmental concerns. It shall coordinate with adjacent cities, the county, and other regional agencies on resource protection programs in the area.

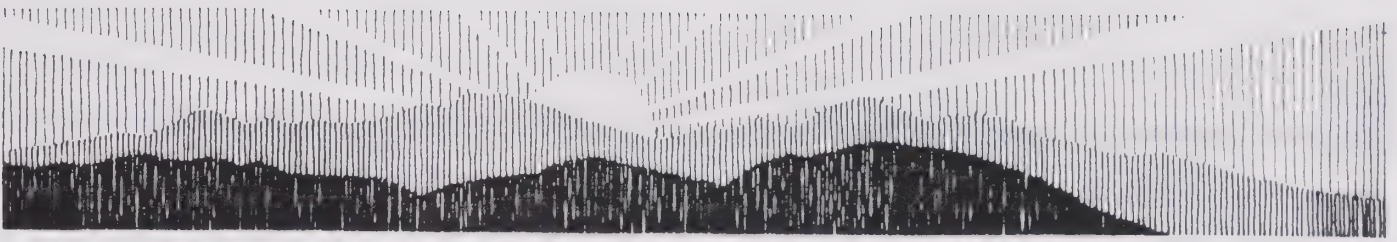
## **20. Wildlife Corridors**

The City shall work towards the protection and preservation of wildlife movement corridors in the area. As part of the development review process, areas which serve as wildlife corridors, such as canyon bottoms, riparian streams, and others, shall be identified. The City shall work with the



Department of Fish and Game, the US Fish and Wildlife Services, the Army Corps of Engineers, and developers and property owners in identifying major corridors which shall be preserved as open space. The City shall also find ways to provide wildlife movement across the I-10 freeway and other manmade barriers to animal migration into adjacent habitats and natural communities. Development within these areas shall be discouraged, unless provisions for alternate wildlife corridors are provided or when there is sufficient data to support that these corridors are not in use.





## SAFETY ELEMENT

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### INTRODUCTION

The Safety Element of the Calimesa General Plan presents a citywide approach for preventing the creation of hazards in the City and planning area and for minimizing the potential for injury, damage and disruption brought by natural and manmade catastrophes and emergencies. The Element establishes safety standards and programs to protect life and property. Public safety standards include guidelines for activities involving risk to the public, as well as measures to follow when development occurs in areas susceptible to natural or manmade hazards. Public safety programs include procedures for the elimination and avoidance of hazards, emergency response during disasters and reconstruction programs to implement after a disaster. The Safety Element develops short-term and long-term actions to reduce risk and lessen the impact of a disaster. It supports the objectives of the City's Multi Hazard Functional Plan (MHFP).

### Relationship to General Plan

As a state-mandated element, the Safety Element fulfills the requirements of *Section 65302(g) of the California Government Code* and the *State Planning and Zoning Law*. It contains goals and policies which address public safety issues in the City. The Element also serves as a public safety plan, identifying standards and programs to protect public safety and outlining adequate facilities and services to serve the emergency needs of the City. The Safety Element maps the location of known hazard areas and available evacuation routes, and indicates peak water supply requirements, minimum road widths, clearances around structures, and other factors affecting safety procedures.

The Safety Element is consistent with other elements of the General Plan, complementing the goals and policies of related elements. The Circulation Element addresses transportation issues, which relates to the Safety Element in that efficient traffic flow benefits emergency response and evacuation objectives. Safety must be considered in the Land Use Element in planning for the urban density and land use designations of identified hazard areas. Social, economic, political and aesthetic factors must also be considered and balanced with safety needs. Therefore, rather than repeating the goals and policies of related elements, this Safety Element is tailored to impart safety considerations in the planning process.

### SUMMARY OF ISSUES

Natural and man-made hazards in the City have been identified in the Safety Profile Report. These hazards present the need for planning, so that residents and structures in the City are not exposed to undue risks. The safety issues and resources in Calimesa are summarized below:



- Regional Faults: A major earthquake on the San Andreas or San Jacinto fault has the potential for setting into motion multiple events, including injuries, crowd control problems, landslide-blocked roads, hazardous materials releases, and isolated structural damage and/or fires. A Magnitude 8 earthquake that ruptures the Mojave, San Bernardino and Coachella segments of the San Andreas fault is a credible worst case scenario for emergency planning purposes in Calimesa. Such an earthquake would cause seismic intensities in the range of X to XI, with mean horizontal peak ground accelerations of 0.6g. Higher horizontal peak ground accelerations could be expected locally, primarily in areas underlain with unconsolidated, saturated soils, and on ridge tops. The seismic wave frequencies generated by this earthquake will be particularly damaging to the low to mid-rise buildings prevalent in Calimesa.
- San Jacinto fault: This fault is considered one of the most seismically active faults in the region. A maximum credible earthquake on the Lytle Creek-Claremont segment of the San Jacinto fault is expected to generate mean peak horizontal ground accelerations of approximately 0.28g in Calimesa. This fault should be considered during the planning and design process of urban developments, along with other identified faults (Banning, San Gorgonio Pass, Pinto Mountain, Cherry Valley, Beaumont Plain, and Crafton Hills faults). Maximum probable earthquakes for design purposes should be recommended on a case-by-case basis, depending on the nature of the proposed project.
- Severe Ground Shaking: Several nearby active faults can cause strong ground motions in the City, which may cause damage to existing development. Earthquake damage to wood-frame single-family residential structures from near-field sources will be moderate to high, and may include walls thrown out of plumb, fallen chimneys, and torsional racking of foundation and wall elements. Slippage of structures off their foundations may be prevalent in pre-1952 houses and in mobile homes. Given the risk, critical facilities must be designed and maintained with a greater margin of safety. The simultaneous occurrence of earthquake-induced landslides, isolated structural damage, impaired utility service, and fire caused by strong ground motions requires adequate emergency response plans.
- Liquefaction and Inundation: Areas underlain by younger alluvium within active stream channels in the western portion of the City are prone to earthquake-induced ground failure (liquefaction), making any new development in this area susceptible to damage. There is no hazard from earthquake-induced dam inundation in the City due to the lack of facilities in the area. However, flood control structures in the City can be damaged during an earthquake, and could pose a limited flood hazard to adjacent areas if these structures contain water at the time of an earthquake. Above-ground water storage tanks can be severely damaged during an earthquake if not properly

braced and baffled. If the water storage tanks in the City are damaged, fire suppression efforts could be seriously hindered.

- Geologic Hazards: The soils in the Calimesa area generally have a high erosion potential. Flash flooding in canyons may pose a threat to public safety if future development is permitted in these areas. Increased erosion of hillsides, with consequent sedimentation along natural drainages generally occurs after a wildland fire. New development or expansion of existing development adjacent to canyons increases runoff and erosion in the drainages that traverse the City. Environmental damage and slope instability may result. Erosion control measures, including the planting of drought-resistant, fire-retardant vegetation, can be used to reduce this hazard. Also, small, potentially active landslides may pose constraints to development along steep-walled canyons.
- Flooding: The 1980 Federal Insurance Map for the Calimesa area delineates the 100- and 500-year flood boundaries in Garden Air Golf Course Wash. Flooding in this area can impact traffic on Calimesa Boulevard, and on the Interstate 10. Newer (1991) Flood Insurance Rate Maps have been prepared by the Federal Emergency Management Agency for the Calimesa area. Flood risk in the City will remain low if canyon drainages remain undeveloped and drainage-control facilities are properly maintained. Long-term planning for drainage devices is needed to control runoff and prevent local ponding, especially adjacent to Interstate 10.

Sheet flow or mud channeled into a residence or group of residences during heavy rains can cause extensive property damage and may endanger public safety. Community participation in the National Flood Insurance Program allows homeowners to obtain flood insurance through their own insurance agent. The program covers any damage caused by "flash flood", "mudflow", or "earth movement" directly related to heavy rainfall/seasonal conditions.

- Fire Hazards: Chaparral-filled canyon areas can pose a significant fire hazard in the City, highlighting the need for strict enforcement of brush management and fire prevention programs. The risk of fire is also influenced by brush hazards in neighboring jurisdictions. Multiple fires, coupled with "Santa Ana" wind conditions, could overwhelm the City's fire suppression resources very quickly.
- Hazardous Materials: Because there are no heavy manufacturing uses in Calimesa, hazardous materials accidents in the City are not likely from the manufacturing area. However, a major transportation accident on Interstate 10 or the Southern Pacific rail line involving hazardous substances could effect the City.

## **GOALS AND POLICIES**

Whether related to earthquakes, geologic hazards, or disaster preparedness, Safety Element goals and policies are guided by the City's responsibility to minimize fatalities and injuries; limit the burden on public and emergency response resources (sheriff, fire, medical services); minimize the costs for cleanup, repair, and recovery; and minimize the long-term impacts caused by business disruption and reduced fiscal resources (tax burden). The goals and policies for the Safety Element address the prevention of hazards in the City, as well as emergency planning and response to reduce human injury, property destruction, and social and economic disruption.

### **Seismic and Geologic Hazards**

**GOAL 1:** Minimize injury and loss of life, property damage, and other impacts caused by seismic shaking, fault rupture, ground failure, and landslides.

#### **Policies:**

- 1.1 Encourage rural and open space uses for areas within identified Fault Hazard Zones. Residential development in these areas will be discouraged.
- 1.2 Require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. Require mitigation of seismic or geologic hazards to the satisfaction of the responsible agencies.
- 1.3 Continue to require preliminary investigations of tract sites by State-registered geotechnical engineers and certified engineering geologists (following Chapter 70 of the Uniform Building Code and Chapter 29 of the California Building Code).
- 1.4 Retain, on a contract basis, a State-certified engineering geologist and a civil engineer to review all geotechnical studies for proposed development, including fault studies, and to review grading operations.
- 1.5 Require liquefaction assessment studies in areas identified as having moderate to high liquefaction susceptibility.

### **Hillside Management**

**GOAL 2:** Minimize grading and otherwise changing the natural topography, while protecting the public safety and property from geologic hazards.



**Policies:**

- 2.1 Discourage any grading beyond that which is necessary to create adequate building pads. The City or County engineering geologist should conduct regular inspection of grading operations to maximize site safety and compatibility with community character.
- 2.2 Discourage excessive grading of slopes greater than 3:1 (three horizontal to one vertical), but where allowed, encourage varied slope ratios on design slopes to reduce the visual impact of grading.
- 2.3 Continue to encourage fill slopes with slope grades of 3:1 and gentler, and do not allow cut or fill slopes steeper than 2:1.
- 2.4 The development review process shall give consideration to the health, safety, and welfare of the community without violation of homeowners' rights to modify/improve their investment.

**Flood Hazards**

**GOAL 3:** Minimize injury, loss of life, property damage, and economic and social disruption caused by flood and inundation hazards.

**Policies:**

- 3.1 Continue to participate in the National Flood Insurance Program.
- 3.2 Conduct the drainage improvements according to the City's Master Flood Control and Drainage Plan to reduce the threat of inundation to developed areas of the City.
- 3.3 Assess potential environmental drainage impacts of new construction, including the necessity and impact of County drains and privately-owned and operated storm drains adjacent to slopes and canyon areas.
- 3.4 Contract with County Flood Control to conduct studies of drainage improvements in selected canyon areas where improvements may be needed.
- 3.5 Require the installation and maintenance of storm drains by homeowners; and strengthen storm drain maintenance district efforts to prevent local flooding and mud and debris flows from overtaxed storm drains during strong storms.

- 3.6 All development within identified flood hazard areas shall comply with the City's Floodplain Management Regulations.
- 3.7 Ensure that development does not divert storm water run-off onto adjacent properties, or cause alterations of natural drainage courses that cannot be adequately handled by existing drainage facilities or the flood control improvements proposed with the development.

## **Fire Hazards**

**GOAL 4:** Reduce threats to public safety and protect property from wildland and urban fire hazards.

### **Policies:**

- 4.1 Ensure that law enforcement and fire services, such as fire equipment and response time, are adequate and able to respond to a major disaster.
- 4.2 Improve, over the next five years, average fire flow capabilities in the City by increasing the number of fire-fighting personnel in Station No. 21 of the Riverside County Fire Department, and most importantly, by supporting and encouraging the local water companies to upgrade the City's water distribution system so it can deliver the fire flow requirements set in the Riverside County Fire Protection and Emergency Medical Master Plan.
- 4.3 Encourage the Riverside County Fire Department in cooperation with the local water companies to conduct annual fire flow tests, especially in areas of high fire hazard.
- 4.4 Ensure that new or existing private access roads are at least 24 feet wide and have adequate turning radius for fire and emergency vehicles.
- 4.5 Coordinate with the Riverside County Fire Department to support the development of secondary water supplies for emergency fire flow needs in an emergency, including on-site supplies of water, supplementary gravity-fed municipal water tanks, and auxiliary water distribution systems.
- 4.6 Support earthquake strengthening and provisions for alternative or back-up essential services, such as water, sewer, electricity, and natural gas pipelines and connections, especially in areas of high seismic or geologic hazard.
- 4.7 Continue to enforce a Class A Roofing Ordinance for residential development and for commercial buildings. Encourage residents with existing wood shingle/unrated roofing

materials to upgrade to fire resistive construction, including fire resistive eaves and awnings.

- 4.8 Encourage residents to plant and maintain drought-resistant, fire-retardant species on slopes to reduce the risk of brush fire and soil erosion in areas adjacent to canyons; and develop stringent site design and maintenance standards for areas with high fire hazard or soil erosion potential.
- 4.9 Fire management plans shall be required for all new development in areas subject to wildfire.

## **Hazardous Materials**

**GOAL 5:** Reduce the potential for hazardous waste contamination in the City.

### **Policies:**

- 5.1 Comply with the enforcement of disclosure laws that require all users, producers, and transporters of hazardous materials and wastes to clearly identify such materials at the site, and to notify the appropriate County, State and/or Federal agencies in the event of a violation.
- 5.2 Identify and restrict the types of hazardous materials that are transported through the City on the Interstate 10, and the Southern Pacific Railroad line. Identify any City roadways along which hazardous materials may be transported, and restrict the transport of such materials on those routes.
- 5.3 Coordinate with railroads and trucking companies to ensure that transport of materials does not present a threat to life or property in Calimesa.
- 5.4 Land uses involved in the production, storage, transportation, handling, or disposal of hazardous materials will be located a safe distance from land uses that may be adversely impacted by such activities.
- 5.5 Coordinate with the Riverside County Fire Department and Riverside County Department of Environmental Health to assure improved response and capability of handling hazardous materials incidents.
- 5.6 Promote efforts to reduce or eliminate the use of hazardous materials. Encourage residents to buy toxic substances only in the amount needed to do the job, and encourage the use of safer alternative products that do not pose a threat to the environment.



## **Critical Facilities**

**GOAL 6:** Ensure to the fullest extent practical that, in the event of a major disaster, critical structures and facilities remain safe and functional.

### **Policies:**

- 6.1** Continue to enforce seismic design provisions for Seismic Zone 4 of the Uniform Building Code and encourage the design of critical facilities with greater margins of safety.
- 6.2** Review proposed projects to ensure that stairways and elevators are adequately strengthened and that emergency generators, computers, and other vital nonstructural building elements are securely anchored.
- 6.3** Support the design and maintenance of conventional development under provisions of Seismic Zone 4; and ensure quality construction and optimum structural and architectural design for conventional development and critical facilities.
- 6.4** Encourage County Public Works input early in the project review process for critical facilities.
- 6.5** Discourage pole platforms as foundations for new single-family residences and encourage correction of existing foundation problems of older pre-1952 residences.
- 6.6** Regularly review the technical data on public safety and seismic safety for use in the planning process and undertake a technical update of the Safety Element every ten years.

## **Disaster Response Planning**

**GOAL 7:** Plan for emergency response and recovery from natural and urban disasters, especially from an earthquake threat.

### **Policies:**

- 7.1** Maintain and update as necessary the City's Multi Hazard Functional Plan. Update emergency plans, contacts, and liaisons with privately operated City, State and Federal emergency response organizations at least every 5 years.

- 7.2 Establish an emergency response organization consisting of representatives from County agencies (Public Social Services, Sheriff, Fire, Chief Administration Office), City departments, utilities, schools, and private citizens.
- 7.3 Establish and maintain mutual aid agreements with neighboring cities and other government's emergency relief agencies; and with private enterprises such as Red Cross, Salvation Army, and local medical institutions to assist in shelter, relief, and first aid operations.
- 7.4 Designate and maintain emergency shelters and reception centers in coordination with County Public Social Services and the local Red Cross chapter.
- 7.5 Establish traffic control contingency plans for disaster routes and support actions to provide secondary access to development or widening of arterials to promote better traffic flow.
- 7.6 Coordinate with County Sheriff and Fire agencies to identify casualty collection points and sheriff/fire staging areas.
- 7.7 Inventory, and where necessary, acquire supplemental disaster communication equipment.
- 7.8 Encourage stockpiling of private supplies of drinking water and non-perishable food. Residents should be encouraged to put together an earthquake emergency kit that should include a flashlight, can opener, battery-operated radio and spare batteries, blankets, and extra clothing and shoes. Seniors should also include in their kits at least one week's supply of any medication that they take regularly, and if needed, a spare pair of glasses, and mechanical walking aid, like a cane.
- 7.9 Encourage private businesses to develop disaster preparedness plans for their employees.
- 7.10 Increase public awareness of City emergency response plans, evacuation routes and shelters, in addition to how to reduce risks at the home and office. Coordinate with neighborhood watch groups, church groups and other similar types of organizations to establish a viable body to provide emergency assistance in the event of a natural disaster.
- 7.11 Inventory and coordinate with managers of dependent care centers (nursing homes, day care centers, etc.), and critical facilities located in the City to facilitate emergency response.

- 7.12 Participate in County wide emergency earthquake scenarios, coordinated by County Disaster Services, Chief Administration Office.

## **DISASTER PREPAREDNESS AND RECOVERY PLAN**

Safety planning issues pertaining to emergency response, disaster preparedness, and disaster recovery develop as a natural consequence of the review of hazards and risks in the City. Calimesa's disaster preparedness and recovery plan address these issues, as a means of promoting public safety and protecting life and property.

In dealing with public safety, it is important to consider prevention, where possible, as the first step in hazard mitigation. This is accomplished by elimination of the hazard, isolation/avoidance of the hazard, or the regulation of land uses and structures in known hazard areas. Exhibit 5-1 shows known hazard areas in the City. Standards for development in these areas shall be developed to prevent individuals from undue exposure to the associated risks. When prevention is not possible, the hazard must be planned for. Emergency planning means the formulation of strategies to minimize human injury, property damage, and economic and social disruption. This includes disaster preparedness, emergency response and recovery and reconstruction.

### **Disaster Preparedness**

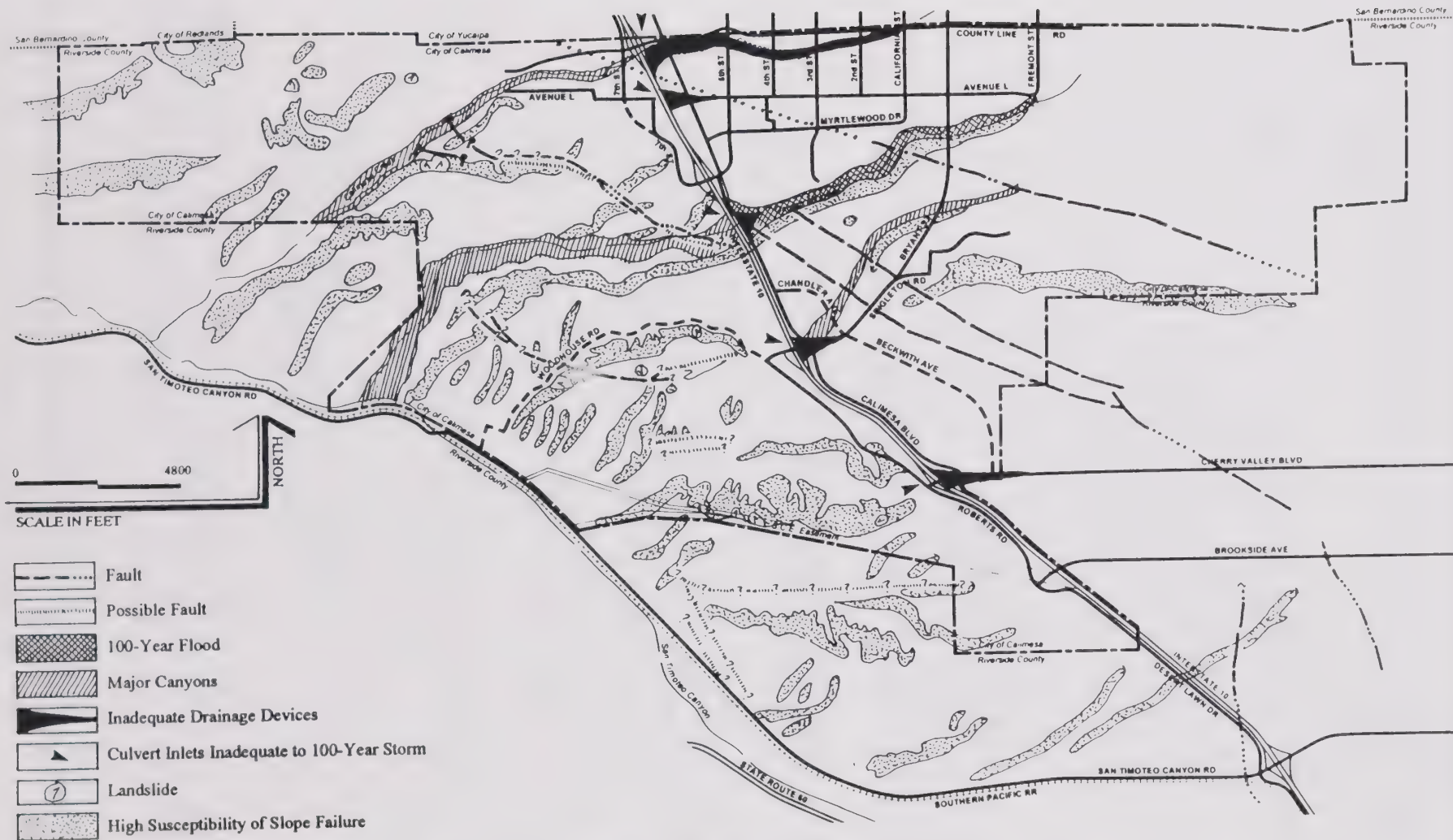
Disaster preparedness requires an assessment of hazards, identification of resources, and development of a procedural network under a variety of disaster scenarios. Most of these issues are addressed by the City's Multi Hazard Functional Plan.

**Determining the Hazards and Risks:** Earthquake shaking, associated fissuring and ground failure; storm-induced landslides and local flooding; and fires and hazardous materials accidents are safety concerns in Calimesa. A major earthquake in the area presents the greatest challenge. Earthquakes occur with little or no warning and often set into motion multiple events, some worse than the original earthquake, and some similar to situations posed by other disasters. A major earthquake on either the San Andreas or the San Jacinto fault is likely to occur within the time frame of this General Plan. A major earthquake that ruptures on all three segments of the southern San Andreas fault is a credible possibility and is useful as a worst-case disaster planning scenario.

**Emergency Response Plan:** The following are selected components that are considered in the development of the City's emergency response plans:

- Identification of an Emergency Operations Center, and potential temporary shelters and reception areas;
- Identification of casualty collection points and sheriff/fire staging areas;





NOTE: See Exhibit 5-2, "Faults and Fault Hazard Zones"; Exhibit 5-5, "Slope Instability"; and Exhibit 5-6, "Flood and Inundation Hazards" of the Profile Report for more detailed information.  
SOURCE: Leighton and Associates, Inc.



- Designation and training of the emergency response organization, which would include representatives from County agencies, City departments, utilities, and volunteer groups;
- Identification of skilled human resources, such as amateur radio operators, heavy equipment operators, and medical support personnel;
- Plans for emergency equipment needs, including battery powered and mobile generators, cranes, bulldozers, large ladders; personal gear such as respirators, gloves, and protective clothing, medical equipment and supplies, and tents for temporary shelter and emergency medical centers;
- Organizational charts and brief operational checklists and phone numbers;
- Inventory and coordination with managers of high occupancy facilities, dependent care centers (nursing homes, day care centers), and critical facilities located in the City. In all cases, facilities with immobile populations, such as day care centers or nursing homes, or residences where handicapped individuals reside should be pre-identified;
- Regular training exercises or drills coordinated with County Agencies to evaluate how well the City emergency response organization responds to a regional simulated disaster;
- Programs that increase public awareness of potential hazards and risks so that residents familiarize themselves with evacuation and emergency response procedures or can take action to protect themselves from a hazard;
- Development of voluntary and neighborhood self-help groups that can respond to light rescue, local fire control, and medical assistance needs;
- Provisions for alternative or back-up essential lifelines, such as fire flow, sewer, and electrical services; and redundant communication lines to ensure efficient response to a crisis, including provisions for specific emergency radio frequencies for the City;
- Mutual aid agreements with neighboring cities, and with County, State, and Federal emergency relief agencies; and with private enterprises such as Red Cross, Salvation Army, and medical institutions to assist in shelter and relief operations.

**Minimum Safety Standards for Peak Load Water Supply, Road Width, and Turning Radius:**

In order to ensure public safety and to maintain an adequate level of fire protection for buildings, minimum safety standards for fire flow and water supply, road width and access, and turning radius for fire apparatus are required. The Insurance Services Office, Inc. (ISO), a company that rates fire



protection capabilities at the community level for insurance purposes, has assigned to the Riverside County Fire Protection District that covers Calimesa a split ranking of 4/9. The ISO classification scheme is based on the distance to, and number of responding fire stations in a community, the average response time, and hydrant spacing. Classification numbers are scaled from 1 to 10, with 1 being the highest rating. In Calimesa, those properties located five road miles or less from a responding fire station, and within 1,000 feet of a hydrant are rated as 4. The properties located five miles or less from a responding fire station, but more than 1,000 feet from a fire hydrant, and properties located over five road miles but less than ten road miles from a responding fire station are assigned a classification number of 9.

Fire flow: Fire Flow is the delivery rate of water necessary to halt and reverse the spread of fire. For the Calimesa area, the Riverside County Fire Protection and Emergency Medical Master Plan (1990 update) specifies an average fire flow requirement of 1,850 gallons per minute (gpm). This value is based primarily on a survey of commercial buildings in the area. However, the actual average fire flow capability in the City is lower than the suggested value of 1,850 gpm, because the personnel and equipment resources available to the local fire station are not sufficient to meet the County requirements. The amount of water that can be delivered by the personnel available at the Calimesa Fire Station has been determined to be 1,120 to 1,125 gpm. The equipment capability in Calimesa (the delivery rate of water that can be achieved with the equipment available to the Calimesa Fire Department) is 1,750 gpm. Furthermore, there is a large variance in the fire flows that can be delivered by the water distribution system in the City of Calimesa. Many of the old pipes that service the City cannot provide the fire flows currently required because fire flow requirements have changed drastically in the last years. These water lines have not been upgraded to meet existing needs. Some of the newer lines meet or exceed the required fire flows in the City.

Minimum road width, access, and turning radius: Roadway standards are defined to permit adequate access to structures during fire suppression operations. Such standards are geared for private access roads including driveways, bridges, alleys and restricted access roads designed solely for fire department vehicle access. Based on Riverside County Ordinance No. 348, the minimum width of paved access roads should be 24 feet. In all cases, fire suppression vehicles should be able to reach within 150 feet of all portions of the outside walls of a building. Because insufficient turning radii can restrict emergency access, minimum turning radius for emergency access ways is 37 feet.

Brush management of vegetation adjacent to buildings is an important element of fire prevention. Minimum requirements may include managing combustible growth within 100 feet of structures, including clearance of hazardous flammable vegetation for a distance of 30 feet around the building perimeter. Additional standards and regulations are found in the Uniform Fire Code and the Riverside County Ordinance No. 546.

**Evacuation and Disaster Routes:** Evacuation involves relocation of occupants from threatened buildings or neighborhoods to ensure public safety. Disaster routes function as primary thoroughfares for movement of emergency response traffic, such as fire control. Disaster routes and

evacuation routes are similar, in that road blockage or traffic jams can reduce response times. However, evacuation activities are controlled by particular situations, and often require improvisation.

Storms, fire, and earthquakes can restrict access to residential neighborhoods with a single route of entry. Road blockage could be in the form of slope failure, road wash out or local inundation. Evacuation is complicated during hazardous materials incidents because of the undetectable nature of some toxic chemicals, and because the movement of gas plumes cannot be readily predicted.

Exhibit 5-2 shows the disaster routes identified in the Calimesa MHFP. These include Interstate 10 and California Street for north-south movement of traffic, and County Line Road for east-west movement of traffic. Additional streets that can augment the disaster routes listed above for City-specific emergency planning purposes include Avenue L, and Singleton Road for east-west traffic flow, and Calimesa Boulevard, Third Street and Fifth Street for north-south traffic movement. Some sections of the City can be accessed by one road only, such as the residential community south of Singleton Road, on the southeast side of the City. Woodhouse Road and Roberts Road service several scattered farmhouses on the west side of Interstate 10. Evacuation efforts can be restricted severely if these roads become impassable during a natural disaster. Efforts will be focused on preventing these roads from damage and developing plans for alternate evacuation.

## **Emergency Response**

The State and Federal Governments require local governments to prepare and maintain emergency plans as a condition of certain funding assistance. Riverside County is located in Mutual Aid Region VI, as designated by the State of California's Office of Emergency Services. The City of Calimesa recently prepared its Multi Hazard Functional Plan (1992), which has as one of its primary objectives the creation of an emergency response organization. The components of the Calimesa organization include:

- Emergency Operations Center (EOC) - coordinates and directs local and mutual aid resources to urgent crisis situations in the City. The EOC operates as a liaison with the County, other City emergency operations centers, and the Governor's Office of Emergency Services. The Senior Center located at 908 Park Avenue has been designated the Emergency Operations Center for Calimesa.
- County Sheriff Department - provides for the protection of life and property, enforces applicable laws, orders and regulations, and provides traffic control, including restricting and rerouting of traffic as needed. It also provides, in coordination with the fire department and other volunteer organizations, for the evacuation and relocation of residents.



- County Fire Department - provides fire suppression and initial hazardous materials containment and assessment, coordinates search and rescue, and provides emergency medical assistance and evacuation support.
- Public Health and Medical Operations - provides for public health, environmental sanitation services, and care and treatment of the ill and injured during a disaster. These services may be provided by the Redlands Community Hospital, the San Geronio Pass Hospital District, local ambulance companies such as Mercy and Life Care, the Red Cross, County Health Service and the County Coroner.
- Construction and Engineering Operations - provides for the procurement, distribution and use of construction and engineering resources for emergency cleanup of debris in public right-of-ways, inspection of hazardous buildings and utility services.

### **Disaster Recovery and Reconstruction**

After a disaster, a major earthquake in particular, short-term disaster recovery requires disaster operations that are not as immediate as fire suppression or medical attention, but that are equally important in protecting the public safety. The City shall develop short-term recovery plans, such as clearing City streets and transportation corridors to be used for evacuation and emergency access. It shall also establish provisions for restoring utilities and performing safety inspections of structures or buildings weakened by an earthquake, or other consequences resulting from fire, flood, or dam failure.

One short-term consequence of a disaster is the temporary displacement of residents and/or motorists stranded in the City. As part of the County Multi-Hazard Functional Plan, the County Department of Social Services maintains an inventory of schools, recreation facilities, and community facilities that can be used as temporary shelters. Emergency mass care facilities that have been identified in the City of Calimesa include the Mesa Grande Elementary School located at 957 South Fremont, and the Seventh Day Adventist Church located at the corner of Fourth Street and Myrtlewood (see Exhibit 5-2). Both of these facilities can temporarily house over 500 people each, if needed. These and other mass care facilities that could service the area in the event of a disaster would be staffed by the American Red Cross and other relief agencies. Shelters should be structurally sound, if indoors, or located adjacent to an open space, such as a park or school. They should provide temporary housing and serve as emergency reception and communication centers.

The City shall also address longer-term recovery, including assistance to:

- Long-term homeless individuals and households created by heavily damaged property or houses, through earthquake, landslide, or mud or debris flow; and







- Rebuilding of structures in areas heavily damaged in a disaster.

Longer-term housing needs will be necessary while damage is assessed, disaster assistance applications are considered, and rebuilding takes place. Allowances in the zoning ordinance to permit temporary housing, such as trailers or tents, in the event of a disaster, can facilitate the recovery process.

After a damaging storm or earthquake, the City will need to:

- Define the affected area;
- Assess the effectiveness of emergency repairs and identify permanent repairs options;
- Help individuals and businesses qualify and apply for funds to repair and rebuild; and
- Incorporate actions to mitigate future hazards by setting standards for rebuilding and new development in heavily damaged areas.

The financial need caused by business disruption and loss of revenue, or the homeowners desire to reoccupy a damaged property, increases the pressure to rebuild rapidly after a disaster. Rational building decisions must be made by the reviewing agency at this stage and should be established in a reconstruction ordinance.

## **IMPLEMENTATION PROGRAMS**

The following programs specify ways in which to implement the City's disaster preparedness and recovery plan. They include measures to prevent risks to existing residents and to minimize injury from an unavoidable disaster or emergency.

### **1. Banning Fault Studies**

The City shall require fault trenching studies on the Banning fault by State-certified engineering geologists, following guidelines established in the Alquist-Priolo Special Studies Act. The City or County geologist shall review the fault studies to ensure that the excavations are conducted within an acceptable level of effort, and that suitable fault setbacks are defined. The recommendations of the fault studies shall be made conditions of approval for the development and redevelopment of residential, commercial, or industrial parcels or tracts that amount to more than half the assessed property value.



## **2. Seismic Design**

There are currently no Alquist-Priolo Special Studies Zones (APSSZ) within the jurisdiction of the City of Calimesa. However, the County of Riverside has delineated two Fault Hazard Zones that extend across the City. The County requires setbacks of structures for human occupancy away from the fault traces unless geologic studies prove that the faults are inactive. Fault hazard zones shall be clearly identified in land-use maps, (parcel and tract) to increase public awareness of fault rupture risks.

The City shall require compliance with seismic design standards for new development. Seismic design provisions for conventional development, such as residential and commercial development, specify that a building shall not collapse under seismic loading. However, structural and nonstructural damage can occur. It is economically infeasible to design earthquake-resistant structures for conventional development. The key is to enforce seismic design provisions with adequate review and inspection to ensure maximum quality construction and optimum design.

The City of Calimesa is located within Seismic Zone 4 specified in the Uniform Building Code, and in County of Riverside Ground Shaking Zones IV and V. The City shall review all projects to ensure compliance with the existing and regularly amended seismic design provisions of the Uniform Building Code.

Coordination among prospective building owners, architects and structural engineers is necessary to ensure that design flaws are identified early in the review process. County/City building inspectors shall review high-occupancy residential, commercial, and other critical facilities with consideration of the following:

- Symmetrical, concrete and steel-framed buildings are particularly earthquake resistant forms of commercial construction and shall be encouraged.
- Irregularly-shaped buildings are more difficult to design to withstand strong ground motions, and are therefore, more susceptible to damage during an earthquake. Irregularly-shaped buildings shall be discouraged.
- Buildings with adverse discontinuities in strength between major structural elements are susceptible to earthquake damage and shall be discouraged.
- Commercial pre-cast tilt-up construction must have adequate diaphragms (horizontal bracing system that transmits horizontal forces to vertical resisting components), and adequate tie-ins or connections between structural components to prevent roof collapse.

- Nonstructural elements must not block exit routes and constrain rescue operations if damaged or overturned during a tremor.
- Stairways and elevators shall be adequately strengthened, and nonstructural components such as emergency generators, computers, and cabinets shall be anchored.

There is no structural inventory of commercial facilities in the City identifying existing design weaknesses such as soft-story, tilt-up concrete construction, or irregular structural or nonstructural design. To identify and correct safety hazards in critical facilities, the City should consider requiring a review by a structural engineer when a building undergoes substantial improvement or resale.

Information regarding the benefits and procedures for correcting structural and nonstructural hazards in private residences shall be made available as part of a voluntary seismic upgrading program.

### **3. Geotechnical Studies**

Several areas along canyon bottoms in the City of Calimesa have a high to moderate susceptibility to liquefaction. Steep-walled canyons are also susceptible to landslides which pose constraints to development. Site-specific geotechnical investigations are the only reliable method of determining liquefaction and landslide potential. The City shall require geotechnical studies for developments which may be located near or in areas identified to contain geologic hazards.

Soils in Calimesa generally have low shrink-swell potential. However, some soils developed on older alluvium and the San Timoteo formation may have clay-rich horizons that may locally have shrink-swell potential. Alluvial soils within active, major drainages may be susceptible to consolidation and hydrocompaction. Site specific studies shall be conducted to evaluate the expansion and settlement potential of soils, prior to development.

### **4. Hillside Grading**

The City of Calimesa is primarily undeveloped. Grading and building permits are being authorized for individual lots involving residential development, including the development of canyon areas. For any grading activity in the City, it has been City policy to minimize disturbance to natural landforms, while preventing conditions that result in landsliding, runoff, or erosion.

Riverside County's Grading Code (modified after Chapter 70 of the Uniform Building Code) and the City of Calimesa Hillside Development Guidelines address safety concerns in the grading process by requiring:

- Preliminary investigations of tract sites by qualified geotechnical engineers and engineering geologists;

- Developers to retain the services of a qualified geotechnical engineer and engineering geologist during construction and coordination between the civil engineer, engineering geologist and geotechnical engineer while supervising grading during construction;
- Certification as to the stability of the building site to adverse effects of rain and earthquakes before issuance of building permits; and
- Mitigation of on site hazards caused by grading that may affect adjacent properties, including erosion and slope instability.

Good grading design must balance safety and aesthetics to preserve the natural visual quality and community character. Mitigation of existing and/or potential slope problems at the site and tract level shall be recommended by qualified geotechnical engineers, engineering geologists, and contractors, as based on detailed site-specific information and current grading codes. The following are selected aspects of safe and unobtrusive grading design. More detailed requirements can be found in the City's Hillside Development Guidelines:

- **Slope Ratio:** Graded hillsides have the least visual impact if fill slope ratios are varied. Slope ratios for cut and fill slopes shall not exceed 2:1 (horizontal to vertical). Fill slopes with a slope grade of 3:1 are preferred.
- **Contour Grading:** If canyons or swales are modified by grading, the finished slopes are least obvious if rounded to conform to the existing, natural slopes.
- **Slope Cover and Irrigation:** Proper vegetation, such as fast growing, deeply rooted, fire and drought resistant cover, inhibits infiltration of water and reduces the hazard of erosion.
- **Drainage Control:** Surface devices such as terrace drainage (horizontal slope and downslope drains) and subdrains (seepage control) need to be constructed to funnel water to storm drains. Berms are also commonly placed at the tops of slopes to channel drainage away from slopes.
- **Debris Protection:** Slough and debris walls can be constructed at the toe of unstable slopes; this acts to impede shallow landslides and debris flows and/or deflect eroded, saturated material into storm drains.
- **Gully Erosion Control:** Gullies need to be protected by paved, concrete channels, or flood velocity reduction structures that can direct water safely to storm drains.



- **Drainage Maintenance:** Drainage devices must be regularly inspected and cleared, especially before storms, to ensure proper function. Private owners may be made responsible for inspection and maintenance of drainage devices on their property.
- **Rodent Control:** Burrowing animals cause excessive slope destabilization. Some jurisdictions utilize districts to implement a rodent abatement program.

Hillside management guidelines must provide for implementation provisions along entire slope segments. To benefit from contour grading, slope cover, and irrigation and drainage/debris protection regulations, they must be applied across several properties adjoining a single slope segment. Designation of Geologic Hazard Abatement Districts (GHAD) is one alternative for developing a comprehensive hillside plan along slope segments adjoining canyons and other hillsides.

The City shall require that planting and irrigation guidelines be followed for all cut slopes greater than five feet in height and fill slopes greater than three feet in height. Recently burned areas are very prone to erosion and shall be quickly stabilized with suitable vegetation.

Potentially active landslides and even engineered slopes can be de-stabilized by excessive water. Clay beds within the San Timoteo Formation may be prone to slippage if excessive water is introduced into either an engineered slope or a natural landslide mass. To ensure that reactivation is prevented, the introduction of water through landscaping or sewage septic systems must be minimized, especially in areas underlain by small natural landslides and/or deep-seated landslides too large to have been mitigated during smaller grading projects.

## **5. Master Flood Control and Drainage Plan**

The City shall implement its Master Flood Control and Drainage Plan (Robert H. Born Consulting Engineers, 1992). This plan has identified several areas in Calimesa where the existing drainage devices are inadequate to handle a 100-year storm. The Master Flood Control and Drainage Plan calls for these structures to be upgraded within five years.

Proper drainage is also necessary to ensure adequate access or egress for emergency response, fire fighting, or evacuation activities. The City shall encourage the correction of sheet flow or concentrated channel flow problems along existing single access routes and in areas where the existing drainage devices are inadequate.

## **6. Fire Hazard Mitigation**

The City of Calimesa contracts with the County of Riverside Fire Department for fire suppression services. Fire Station No. 21 is manned by both County Fire Department personnel and volunteers.

Mutual aid agreements involving fuel management, suppression assistance, and logistical support are provided through the Riverside County Fire Department.

The City recently adopted the 1991 Uniform Fire Code. However, the County Fire Department follows Riverside County Ordinance No. 546, which is more stringent than the Uniform Fire Code. The Fire Department currently reviews structural plans to conform with Ordinance No. 546. The Riverside County ordinance also requires a Class B or better roofing for new residences, and Class A for commercial buildings (Class B roofs are pressure treated, wood-shake shingles. Class A roofs are chemically-treated, ceramic and steel-covered wood tiles). The City shall require Class A roofing for new residential development.

Public assembly facilities, high occupancy facilities, and facilities housing immobile populations (schools, nursing care, convalescent home) require special emergency needs in addition to fire suppression. High occupancy facilities (100 persons or more), or other occupancies of special concern in Calimesa, as noted by the County Fire Department, include the Senior Center and City Hall. Fire drills and public education are needed to facilitate rescue operations and fire containment. Additional fire protection for these facilities can include fire-resistant construction and interior automatic fire sprinkler systems.

With future development and growth in the City, fire suppression services in Calimesa will have to be augmented. The Oak Valley Specific Plan anticipates construction of three fire stations to meet the needs of this development. Construction of these additional stations will improve the average response time to an emergency in the City.

In areas with high fire risks, the City shall encourage the replacement of existing vegetation with drought-resistant, fire-retardant plants that also provide for erosion control. The City shall also promote brush clearance in areas adjacent to isolated structures to provide additional fire protection.

## **7. Emergency Fireflow**

Fire flow requirements for the City are higher than the actual average flow capability provided by both available personnel and equipment. The water distribution system in some areas of the City is not capable of providing the County-required fire flow. The water reservoirs in the City are insufficient to store a three-day supply of water. In the event of an earthquake, secondary water supply systems may be necessary to supplement these reservoirs. This is especially true if pipeline damage reduces the available fire flow, and municipal water sources cannot be used to suppress fires in isolated areas of the City. Emergency generators to pump water wells can be used to supplement the supply of water for emergency fire flow. The City shall coordinate with the Yucaipa Valley Water District and the South Mesa Water company in the upgrade of the existing water system, to provide adequate emergency fire flow capacity over maximum water demand.



## **8. Hazardous Materials Regulations**

One of the best ways to reduce the impact of a hazardous material release is through regulation governing the storage, use, disposal, and manufacture of hazardous materials. Several regulations have been implemented to address the issue of hazardous substances at the state, federal and county levels. Cities also have the right to develop more stringent requirements than those established by the State.

The County of Riverside Department of Environmental Health, Hazardous Materials Division is the administering agency in Calimesa for the implementation of the Riverside County Hazardous Materials Release Response Plan and Inventory Program. The County of Riverside Department of Environmental Health, Hazardous Materials Division and Riverside County Fire Department maintain emergency response teams at 1550 East 6th Street in Beaumont. The local volunteer fire department in Calimesa can respond to an emergency within Calimesa, if needed.

Businesses that handle hazardous and acutely hazardous materials above certain established quantities are required to submit a yearly inventory and amended business plan, if changes have occurred with respect to the substances that they handle, to the County of Riverside Department of Environmental Health, Hazardous Materials Division. Business plans are designed to be used by the County of Riverside Department of Environmental Health, Hazardous Materials Division and Riverside County Fire Department emergency response teams during a hazardous material release to evaluate and mitigate the situation as quickly and accurately as possible. Within the City of Calimesa, 13 businesses appear on the hazardous "Generator List" and seven businesses appear on the hazardous materials "Disclosure List" compiled and maintained by the County of Riverside Department of Environmental Health, Hazardous Materials Division.

Inspectors from the County of Riverside Department of Environmental Health, Hazardous Materials Division inspect the businesses that have submitted business plans at least once every year to validate the accuracy of their plans. It is the responsibility of the handlers to submit any changes (such as types or quantities of hazardous materials used, ownership, etc.) to the County of Riverside Department of Environmental Health, Hazardous Materials Division.

## **9. Hazardous Materials Use**

Structural and nonstructural failures as a result of strong ground shaking or surface fault rupture during an earthquake can increase the probability of a hazardous materials release. The City shall require risk reduction alternatives for hazardous materials storage, which may include:

- Enforcement of the most recent Uniform Building Code regarding seismic design provisions for commercial development and critical facilities. Facilities that store hazardous materials shall be designed to withstand strong ground motion with only limited structural damage.



- Enforcement of current regulations, including those in the Uniform Fire Code, regarding the storage of hazardous materials, with an emphasis on secondary containment systems, segregation of reactive chemicals and monitoring systems.
- Immobilization of all unanchored hazardous materials containers.
- Encourage storage of the minimum amount of hazardous materials necessary for day to day operation, especially of those materials that can produce toxic gaseous clouds.
- Encourage the use of less hazardous or nonhazardous substances whenever possible.
- Proper and early disposal of hazardous wastes.

## **10. Critical Facilities**

Some segments of the lifeline utilities and infrastructure that serve Calimesa can be expected to be damaged in a major earthquake. Critical facilities shall maintain back-up power, including generators, fuel, and batteries. The City shall encourage and support programs established by private utility companies designed to strengthen connections and lines in areas of high hazard, and to provide for back-up and/or redundant service alternatives. Critical facilities shall be located at greater distances from the fault trace than conventional development.

## **11. Response Coordination**

The City needs to coordinate with the County Fire, Sheriff, and Chief Administration Office to implement effectively the provisions established in the Calimesa Multi Hazard Function Plan. Emergency plans for the City of Calimesa must also reflect the nature of impacts likely to result from earthquakes (multiple incidents), storms (damaged roads), and fires (evacuation).

The City needs to coordinate with County Public Social Services and the American Red Cross to designate and operate emergency shelters and reception centers. Ideally, shelters shall serve as first aid stations, public information and emergency coordination centers, as well as gathering/collection areas for displaced or evacuated people.

In addition, coordination with self-help neighborhood/facility groups and organizations is necessary to maintain the efficiency of the City's emergency response organization. Increased public awareness of City emergency response plans, evacuation routes, and shelters, in addition to information on how to reduce risks at the home and office, improves overall safety in the City.

California Division of Mines and Geology Special Publication 60, Earthquake Planning Scenario for a Magnitude 8.3 Earthquake on the San Andreas fault in southern California (Davis, et al., 1982) can be used as a guide to developing emergency planning contingencies for the City. A major earthquake involving all three segments of the San Andreas fault can be considered the worst-case earthquake disaster for emergency planning purposes.

## **12. Evacuation Routes**

Provisions need to be made for traffic control contingencies along City designated disaster routes, especially for Singleton Road, which serves as sole access for a relatively large residential community in the southeastern portion of the City. Routes (such as Singleton Road and Woodhouse Road) that provide single access to neighborhoods or where emergency access could be threatened shall be identified and targeted for the following actions:

- Implementation of mitigation measures that prevent earthquake induced slope failures from blocking these roads;
- Improvement of streets of inadequate width or inadequate drainage that can hinder the mobilization of fire equipment and other emergency vehicles; and
- Development of plans for traffic control contingencies and evacuation of high occupancy and immobile populations.

## **13. Reconstruction Ordinance**

Reconstruction policies are necessary to guide rebuilding decisions in the aftermath of a major earthquake or other disaster. The City may consider enacting a reconstruction ordinance that considers the impact of reestablishing areas proven to be susceptible to a high-risk from a natural or urban hazard. It can also facilitate rebuilding, in certain cases, by defining conditions when permits can be waived if redevelopment is safe and beneficial to the City.

A reconstruction ordinance allows the definition of standards for rebuilding decisions before a disaster occurs. Circumstances for bringing the damaged property up to current code or some other acceptable level are usually incorporated into such an ordinance.

A main element of a reconstruction ordinance is the "preliminary assessment of damage" and initial recommendations. Rebuilding decisions often require detailed geotechnical/geologic studies or structural analysis to determine and assess the effectiveness of emergency repairs, and identify appropriate permanent repairs. One option is to require environmental studies if more than 50 percent of the property is damaged in a disaster, whether it is caused by structural damage or fault rupture, landsliding, or other ground failure.

## **APPENDIX A: EARTHQUAKE PREPAREDNESS**

A major earthquake will pose the greatest challenge to the City's emergency response organization because the simultaneous occurrence of multiple incidents can quickly overwhelm the emergency relief agencies of the area. Therefore, the City shall focus on improving public awareness of earthquake preparedness and encouraging public self-help. The City's Multi-Hazard Functional Plan provides a logistical framework for governmental response. The following is a list of tasks that individuals at the home or office shall take to lessen the overall impact of a major earthquake.

### **Before an Earthquake:**

- Remove or correct interior nonstructural hazards, such as top-heavy bookcases and storage cabinets, water heaters and other appliances. Anchor furniture and water heaters against the wall, and replace stiff connections to gas-fired appliances with flexible ones.
- Set aside a supply of emergency food and water, and obtain first aid materials, a gas shut-off wrench, fire extinguisher, and battery-powered radio. Identify neighbors with first aid training and check for an emergency supply of medication for all members of the family, especially the children, handicapped, and elderly.
- Practice taking cover. This exercise will make people aware of the safest places during an earthquake, such as under a desk, table, bed or strong doorway. The maximum duration of severe shaking from a major earthquake expected to impact the City of Calimesa is roughly 50 seconds.
- Practice exiting. Walk the possible escape routes from your house or office and plan to avoid light fixtures, masonry chimneys, unsupported walls and other overhead hazards. Power for elevators and escalators may fail, so be aware of alternate exits. Do not panic or run; crowded exits shall be evacuated in an orderly manner to avoid additional injuries in a rush for the door.
- Practice turning off the electricity and water, and know how to turn off the gas at the street main at your house. Do not practice gas shut-off; for safety reasons only the utility company shall turn it back on. Be sure everyone in the household can locate main switches and valves.
- Review the responsibilities of each family member after an earthquake. Plans for picking up children from schools, day-care centers, or other



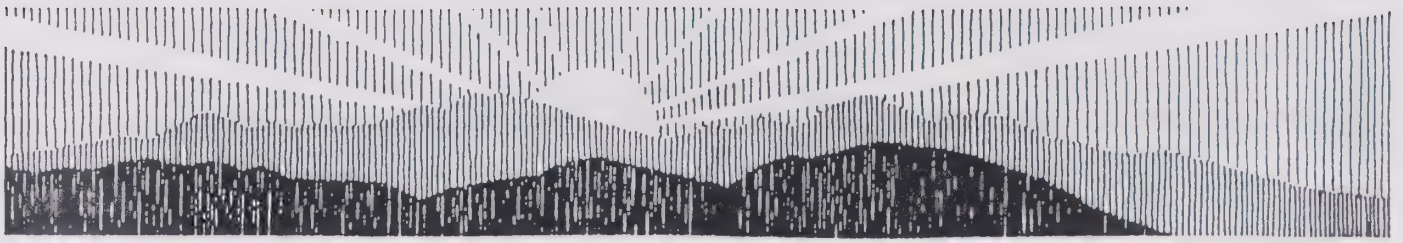
facilities with dependents shall be regularly checked and reviewed. Have available the phone number of a person outside of the area that can manage and relay family messages.

- Contact City and neighbors about forming a co-op self-help group.

After an Earthquake:

- Check for injuries in your family and neighborhood.
- Extinguish small fires and check for additional fire hazards, such as cracked walls, roof lines and attics, and other physical signs of structural damage that can cause a malfunction in the electrical wiring.
- Check for the smell of leaking gas, and if detected, shut off gas at the gas meter. Unanchored gas heaters or gas-fired hot water heaters may experience damage to valves and service connections.
- Shut off electrical power if there is damage to the wiring or there is a gas leak. The main switch is usually located in or next to the main fuse or circuit breaker box.
- Clean up flammable liquids, medicines, and other harmful substances.
- Check for structural and nonstructural damage, such as cracked chimneys, fallen power lines, and other objects that may become unstable and fall during an aftershock.
- Try not to use water in case there is drop in water pressure for firefighting purposes (fire flow). Toilets shall not be flushed until both incoming water lines and outgoing sewer lines have been checked to see if they are open.
- Try not to use the phone unless it is a genuine emergency. Emergencies, damage report alerts, and other information can be obtained by turning on your radio.
- Report serious injuries and significant damage to a nearby City emergency operations center.





## NOISE ELEMENT

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### INTRODUCTION

Excessive noise levels disturb and disrupt human activities and can affect the health of individuals. The Noise Element provides measures to minimize noise problems in the City and to protect public health. With the majority of the planning area devoted to residential uses, it is important that noise sources are controlled at the source, are located away from the residential communities, or buffers are provided between the main sources of noise and residences. The noise control plan in the Noise Element explores these options, along with noise insulation standards and land use compatibility along identified noise corridors.

### Relationship to the General Plan

As mandated by the *California Government Code Section 65302(f)*, the Calimesa Noise Element analyzes noise problems in the City and provides guidelines to limit community exposure to excessive noise levels. It follows the guidelines established by the *Office of Noise Control of the State Department of Health Services*. The Noise Element indicates noise levels from vehicular traffic along major roads and highways. Noise contours are plotted to illustrate noise levels in areas adjacent to roadway. The noise contour maps identify existing noise levels in the City and projected noise levels expected from future traffic.

### SUMMARY OF ISSUES

The City of Calimesa has a relatively quiet environment, and the noise concerns in the City are primarily associated with vehicular noise. Noise issues are discussed in the Noise Profile Report. There are various federal and state regulations which control noise sources and levels, yet there continues to be noise from the following areas:

- Vehicular noise from the Interstate 10 freeway and major roadways: Because freeway noise cannot be controlled by the City, noise barriers along the freeway may have to be provided to limit excessive noise. Land uses near the freeway would also have to be constructed to prevent excessive noise impacts and noise-sensitive uses (such as churches, schools, libraries, medical facilities, and residences) would best be located away from these areas.
- The Southern Pacific Railroad train/rail activity: While no sensitive land uses are currently found in the area, future development could be exposed to intense noise from



occasional trains, if located too near the tracks without providing noise control measures.

- Stationary noise sources in the manufacturing and commercial areas: Industrial activities may result in high noise levels when machinery is in operation. Trucks serving industrial and commercial uses also create noise that could disrupt adjacent residential areas. Commercial and business activities, clients and patrons are the main sources of noise along the Calimesa Boulevard commercial corridor.
- Residential areas: Residential areas contribute resident gatherings and activities, vehicles and operating household equipment to the ambient noise environment. Schools create their own type of noise from buses, students, school activities, and outdoor games.

Certain activities are particularly sensitive to noise. These include sleeping, studying, reading, leisure and other activities requiring intense concentration. Hospitals and convalescent homes, churches, libraries, schools, and child care facilities are considered noise-sensitive uses and are best located away from noise sources. Residential areas are also recommended away from noise-impact areas. In Calimesa, the noise sensitive uses of Mesa Grande Academy, child care facilities (Quality Pre-school), churches, the Calimesa library, and residential areas are not found near the Interstate 10. Thus, these uses are not exposed to vehicular noise from the freeway. Residential developments and mobile home developments are located along County Line Road, Calimesa Boulevard and Avenue L West, three of the City's major thoroughfares, and may be subject to vehicular noise throughout the day.

Noise issues that face the City include noise from mobile sources and the noise compatibility of various land uses. The Noise Element will contain goals and policies that will seek to prevent the adverse impacts of noise on noise-sensitive land uses and to reduce the disturbance created by vehicular and train noise.

## **GOALS AND POLICIES**

Noise goals and policies are divided into two areas; 1) Land Use Compatibility, and 2) Noise Control.

### **Land Use Compatibility**

**GOAL 1:** Ensure that all land uses are protected from excessive and unwanted noise.

**Policies:**

- 1.1 Establish acceptable limits of noise for various land uses throughout the City. Future development that could increase ambient noise levels shall be required to mitigate the anticipated noise increase, to the extent possible.
- 1.2 Noise sensitive uses (such as schools, libraries, homes, hospitals, medical facilities, etc.) shall be discouraged in areas where noise levels exceed acceptable limits.
- 1.3 Encourage good acoustical design in new construction.
- 1.4 Work towards the preservation of a quiet living environment for all residential neighborhoods.
- 1.5 Provide buffer areas between noise sources and other developments.
- 1.6 Provide measures to limit construction noise in residential areas.

**Noise Control**

**GOAL 2:** Work towards the reduction of noise impacts from vehicular traffic and trains.

**Policies:**

- 2.1 An acoustical study shall be required for new residential development in areas within designated CNEL contour of 60 dB or greater to determine what level of sound insulation, landscape buffer or sound attenuation wall, if any, is required to meet the CNEL acceptable interior noise level of 45 dB.
- 2.2 Include noise mitigation measures in the design of new arterial roadway projects.
- 2.3 Establish, maintain, and coordinate with adjacent cities and County agencies for noise abatement.
- 2.4 Develop and adopt a comprehensive noise ordinance which will prohibit unwanted and unnecessary noise within Calimesa. The Noise Ordinance will establish a noise enforcement and regulation program, along with setting standards for noise levels in the community.
- 2.5 Noise mitigation measures will be included in the design and approval of any development on property located adjacent to the Southern Pacific Railroad.

- 2.6 Residential development in areas adjacent to freeway, arterial streets, the railroad, and other noise sources shall be designed to reduce the potential for noise impacts.
- 2.7 Regulate the use of residential streets by trucks, trailers, and construction vehicles, to the extent possible.

## **NOISE CONTROL PLAN**

It is the goal of the City of Calimesa to provide an environment which is free of excessive and disruptive noise. The City's Noise Control Plan outlines ways to achieve a noise compatible environment. The Plan calls for the reduction of noise in areas currently subject to high levels of noise and the prevention of the creation of excessive noise in the future. It combines different approaches to noise mitigation, including:

- Controlling noise at the source (mufflers, insulation, wall construction, seals, etc.);
- Interrupting the noise path (through the use of barriers, buffers, walls, landscaped areas, berms, trees, hedges, buildings, etc.);
- Separation of noise sources and sensitive uses by distance;
- Blocking the noise at the receptor (insulation, smaller openings, air conditioning, thick or double glazing, fixed panes, etc.); and
- Use of more pleasant sounds to mask the intrusive noise (water, rustling leaves, music, etc.).

Controlling noise at the source is the most effective way of preventing noise problems. Since this is not always possible (as with vehicle, truck and train noises, existing "noisy" uses, and activities involving a large group of people), interrupting the noise path is the most common noise reduction measure. When noise barriers are not effective, separating the use or blocking the noise at the receptor may be necessary. The City will implement various methods for noise control, choosing measures which are feasible, appropriate, and effective, according to the prevailing conditions.

Compatibility between noise and land use is achieved through the separation of noise sensitive uses and noise sources in the community. Guidelines for compatibility deal with the general distribution, location, and intensity of land uses in order to alleviate and prevent noise problems. This may include locating noise sensitive uses away from streets carrying high traffic volumes and locating noise sensitive uses away from major sources of stationary noise (industrial areas, intensive commercial developments). The development of highways and major arterial and intensive land uses (industrial and commercial uses) should be located away from residential and other noise sensitive uses also. Where these measures are not possible, sound barriers, buffers, landscaping, and other



noise attenuation measures shall be provided. The City should adopt the Noise Compatibility Criteria established by the State Office of Noise Control, as shown in Exhibit 6-1.

Existing land uses along the freeway are mainly commercial and industrial, with few high density residential uses. These uses are compatible with a high noise environment created by the freeway except for the high density residential. High density residential uses may have to be built with acoustical control measures to maintain acceptable noise levels for living areas. Since the state and federal governments preempts cities on the control of noise from vehicles, the City should restrict trucks and other noisy vehicles in residential areas, as a way of avoiding disturbances from these vehicles.

Land near the railroad tracks is currently vacant and has been designated as Open Space and Low Density Residential, in order to lessen or prevent noise problems. Low Density Residential uses near the railroad may have to be provided with noise mitigation features such as berms, walls, landscaping buffers, and acoustical design in order to maintain acceptable outdoor and indoor noise levels.

Future noise problems are identified through estimates of traffic and their associated noise on major roadways. Noise levels at buildout of the Land Use Plan were estimated using the projected traffic volumes on City streets. The Federal Highway Administration (FHWA) Noise Prediction Model was used to estimate the roadway noise levels. Table 6-1 provides the distance of the 70, 65, and 60 dB CNEL noise contours from the roadway centerline and Exhibit 6-2 shows the future noise contours.

TABLE 6-1 CALCULATED FUTURE ROADWAY NOISE LEVELS				
Roadway Segment	Distance From Roadway Centerline to CNEL (in feet) <sup>a</sup>			CNEL 50 ft. from Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Interstate 10 <sup>b</sup>				
County Line to Sandalwood	507.9	1602.3	5065.3	78.1
Sandalwood to Singleton	526.9	1662.7	5256.3	78.3
Singleton to Cherry Valley	464.9	1464.9	4630.9	77.7
South of Cherry Valley	450.3	1419.7	4487.7	77.6
Calimesa Blvd				
County Line to Ave L	0	92.5	271.7	65.4
Ave L. to Sandalwood	0	86.6	251.8	65.0
South of Sandalwood	0	154.1	475.0	67.8
North of Singleton	0	99.7	296.3	65.8
Singleton to Cherry Valley	0	107.1	320.9	66.1

**TABLE 6-1  
CALCULATED FUTURE ROADWAY NOISE LEVELS**

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet)*			CNEL 50 ft. from Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
County Line Road				
7th to I-10	0	64.8	174.0	63.4
I-10 to 5th	0	156.4	482.7	67.9
5th to 4th	0	98.1	301.7	66.3
4th to 3rd	0	83.0	252.3	65.6
3rd to 2nd	0	78.3	236.9	65.3
2nd to California	0	68.6	204.5	64.6
California to Bryant	0	0	96.1	61.2
Avenue L				
I-10 to 5th	0	0	121.8	62.3
5th to 4th	0	0	102.1	61.5
4th to 3rd	0	0	87.1	60.8
3rd to 2nd	0	0	81.2	60.4
2nd to California	0	0	75.3	60.0
California to Bryant	0	0	94.6	61.2
Fifth Street				
County Line to Avenue L	0	0	134.0	62.8
Avenue L to Sandalwood	0	0	124.8	62.4
California				
County Line to Avenue L	0	0	156.9	63.4
Myrtlewood				
Calimesa Blvd to 5th	0	0	123.3	63.0
5th to California	0	0	0	59.1
Cherry Valley Blvd	0	0	158.9	63.0
Roberts Road				
Sandalwood to Singleton	0	126.3	393.0	67.5
Singleton to Cherry Valley	0	155.5	479.6	67.9
Desert Lawn Drive	0	65.8	195.3	64.4



LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L <sub>dn</sub> OR CNEL, dB					
	55	60	65	70	75	80
RESIDENTIAL-LOW DENSITY SINGLE FAMILY, DUPLEX MOBILE HOMES	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
RESIDENTIAL- MULTI FAMILY	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
TRANSIENT LODGING- MOTELS, HOTELS	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
SCHOOLS, LIBRARIES CHURCHES, HOSPITALS, NURSING HOMES	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
AUDITORIUMS, CONCERT HALLS, AMPITHEATRES	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
PLAYGROUNDS, NEIGHBORHOOD PARKS	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
OFFICE BUILDINGS, BUSINESS, COMMERCIAL AND PROFESSIONAL	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX
INDUSTRIAL, MANUFACTURING, UTILITIES, AGRICULTURE	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX	XXXXXX

## LEGEND

**NORMALLY ACCEPTABLE**

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

**CONDITIONALLY ACCEPTABLE**

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

**NORMALLY UNACCEPTABLE**

New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**CLEARLY UNACCEPTABLE**

New construction or development should generally not be undertaken.

**CONSIDERATIONS IN DETERMINATION OF NOISE-COMPATIBLE LAND USE****A. NORMALIZED NOISE EXPOSURE DESIRED**

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L<sub>dn</sub>. Normalized values are obtained by adding or subtracting the constants described in Table 1 to the measured or calculated value of CNEL or L<sub>dn</sub>.

**B. NOISE SOURCE CHARACTERISTICS**

The land use-noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65dB CNEL as the criterion which airports must eventually meet to protect existing residential communities from unacceptable exposure to aircraft noise. In order to facilitate the purposes of the Act, one of which is to encourage land uses compatible with the 65dB CNEL criterion wherever possible and in order to facilitate the ability of airports to comply with the Act, residential uses located in Community Noise Exposure Areas greater than 65dB should be discouraged and considered located within normally unacceptable areas.

**C. SUITABLE INTERIOR ENVIRONMENTS**

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL of L<sub>dn</sub>. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration, should govern the minimum acceptable distance to a noise source.

**D. ACCEPTABLE OUTDOOR ENVIRONMENTS**

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.





**TABLE 6-1  
CALCULATED FUTURE ROADWAY NOISE LEVELS**

Roadway Segment	Distance From Roadway Centerline to CNEL (in feet)*			CNEL 50 ft. from Centerline of Near Travel Lane
	70 CNEL	65 CNEL	60 CNEL	
Singleton Road				
Roberts to I-10	0	143.6	441.1	67.5
I-10 to Beckwith	0	99.7	296.3	65.8
East of Beckwith	0	82.7	238.0	64.8
on Bryant		63.1	168.0	63.2
Beckwith Avenue	0	0	158.4	63.5
<p><sup>a</sup> Does not consider any buffering of noise.</p> <p><sup>b</sup> Traffic noise levels for receptors within 50 feet of the roadway centerline would require a site-specific analysis to determine the CNEL values.</p> <p>Source: Meyer, Mohaddes Associates, Inc., David Evans and Associates, Inc., 1993.</p>				

The estimates in Table 6-1 are calculated on the basis of no noise buffers and/or barriers within each development or street segment, therefore attenuated noise will be lower than indicated. Generally, uses within the 65 dB CNEL contour will be subject to high noise levels. The City should require noise mitigation for noise-sensitive uses starting at the 60 dB CNEL contour. These mitigation measures may include, but not be limited to, site planning techniques which minimize noise transmission (such as locating driveways, loading areas, machinery, and other noisy areas farthest from a noise sensitive use); and acoustical design to achieve acceptable noise levels.

## IMPLEMENTATION PROGRAMS

Implementation of the Noise Control Plan is proposed through the adoption, realignment or compliance with local laws such as noise ordinances, requirement for acoustical analyses, and compliance with state and federal legislation.

### 1. Noise Ordinance

The City shall review and revise its noise ordinance in order to provide greater control of excessive noise levels in the City. The ordinance shall be brought into compliance with state and federal standards, which establish thresholds for noise abatement and attenuation in order to reduce the potential for health hazards as associated with high levels of noise. The ordinance shall provide measures to control noise at the source and control its intrusion into adjacent properties. The ordinance shall include:

- Noise and land use compatibility;
- Acceptable noise levels at the boundaries of the property;
- Requirements for buffers, sound barriers, landscaping, and other measures for incompatible land uses where unavoidable;
- Restrictions of operating hours and length of operation for construction activities and equipment, power mowers, garbage collection, street sweeping, truck deliveries, leaf blowers, other noisy activities in noise sensitive areas within the hours of 7 a.m. and 10 p.m., unless work is made in response to an emergency or special purpose;
- Restriction on truck routes and vehicle speeds and regulation of traffic flow;
- Periodic investigation of problem noise sources;
- Coordination with the Sheriff's Department and the Fire Department to minimize helicopter and siren noise over residential areas during the late nighttime and early morning hours;
- Penalties (such as fines, revocation of permits or licenses, etc.) for violations of the noise ordinance; and
- Controls on vibration effects that accompany or result from loud noise.

Enforcement of the noise ordinance would be focused at controlling non-transportation related noises (transportation noise are regulated by state laws.) The City shall coordinate with the Sheriff's Department in strictly enforcing the noise ordinance.

## **2. Acoustical Analysis Reports**

The City shall require acoustical analysis reports for development projects that are located within existing and future 60 dB CNEL impact areas or as deemed necessary by the City. All acoustical analysis reports shall be prepared by a qualified acoustical engineer with experience in environmental noise assessment and noise control design. The acoustical analysis report shall evaluate the impacts of existing and future ambient noise and project-related noise levels. It shall identify adjacent noise sensitive land uses, such as schools, hospitals, residential developments, and provide measures to maintain acceptable noise levels within these developments. The City shall also require the reports to include acoustical design for residential projects, schools, libraries, hospitals and other noise sensitive uses when they will be located adjacent to the freeway or major arterials in the City. The City shall also require developments which will generate large congregations or truck traffic or maintain late nighttime hours to provide noise mitigation. The noise control measures shall be





EXHIBIT 6-2  
FUTURE NOISE CONTOURS



adequate to achieve the appropriate interior and exterior noise levels (through sound insulation, site planning, acoustical design, etc.) as established by the City ordinance. This shall include compliance with the State's Noise Insulation Standards and other pertinent federal and state regulations.

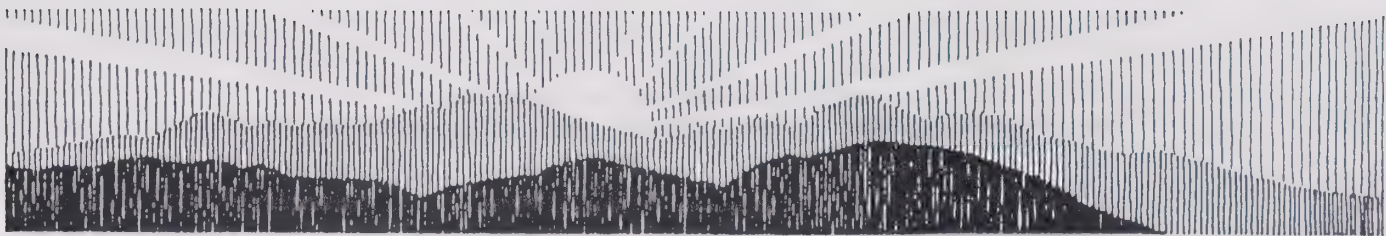
### **3. Noise Legislation**

The federal government preempts local control of noise from aircraft operations, railroads, freeways, occupational noise, and federally-funded projects. The State controls vehicular noise at the time of manufacture and during operation on public roads, as well as noise from in the workplace, classrooms, libraries, multi-family projects, motels and hotels.

The City shall coordinate with federal, state and county agencies on noise control programs and legislation, where necessary or required by law. These agencies include the Department of Housing and Urban Development, Department of Labor, the Environmental Protection Agency, the Federal Highway Administration, State Department of Health, State Department of Transportation (Caltrans), County of Riverside, and the State Department of Motor Vehicles. These agencies are involved in one or more of the following noise concerns: industrial noise, highway and freeway noise, occupational noise, construction noise, land use compatibility, building siting and noise, product noise, and vehicular noise. The City shall also work closely with Caltrans in the reduction of noise impacts on schools and residences from vehicles on the Interstate 10 freeway. It shall coordinate with the Southern Pacific Railroad Company to find ways to reduce the level of noise produced by train movement through the City (through regular maintenance of trains and tracks, limited use of horns, etc.).







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## AIR QUALITY ELEMENT

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### INTRODUCTION

Air pollution refers to the presence of emissions which adversely affects the health of humans and other living organisms. It is generated by vehicle exhaust, electrical and natural gas generation, construction equipment, and industrial activities. Air quality is measured by the amount of pollution as influenced by climatic factors such as sunlight and wind patterns. Southern California's air quality is severely degraded, despite 45 years of the most stringent pollution controls in the nation. State and federal air quality standards for many pollutants, which were established to protect public health, are violated more frequently in Southern California than in other portions of the United States or California.

The South Coast Air Basin of California, which includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, has the most polluted air in the nation. It is the only area designated by the U.S. Environmental Protection Agency (EPA) as having "extreme" air pollution. Early efforts in air pollution control in the basin focused on reducing industrial emissions, and later expanded to include automobile emissions. Recent efforts have been directed at altering traditional commuting patterns, promoting mixed use developments which combine residential and commercial land uses and attract pedestrian activity, and reducing energy sources of emissions. In Calimesa, vehicle emissions and fugitive dust from wind-borne soil and construction activities are the major contributors to air pollution.

### Relationship to the General Plan

The Calimesa Air Quality Element addresses local issues and programs to improve air quality. The Air Quality Element is not a state-mandated element but is one of the recommended methods under the *1991 Air Quality Management Plan for the South Coast Air Basin*. The goals and policies of this element correspond to and meet the underlying goals and requirements of the 1991 Regional Air Quality Management Plan (AQMP) which apply to local governments. The AQMP emphasizes operations that the City shall assume and programs that will facilitate participation by local businesses and residents in improving local and regional air quality. While the City of Calimesa does not regulate air quality in the area or the region, local actions are required in order to demonstrate conformity to the adopted regional air quality plan.

This Air Quality Element focuses on programs that will allow the City of Calimesa to contribute to the attainment of regional, state, and federal air quality standards. It includes land use, transportation and site development alternatives which reduce vehicle emissions and fugitive dust to achieve improved local air quality.

## **SUMMARY OF ISSUES**

The Air Quality Element summarizes the major issue areas according to a local and regional context. More detailed information on these issues can be found in the Air Quality Profile Report.

- State and Federal regulations: The federal Clean Air Act was enacted in 1977 and established ambient air quality standards. Because previous amendments and compliance mechanisms for the South Coast Air Basin have not been effective, the 1990 Amendment to the Act outlines new ways of attaining federal air quality standards. The California Clean Air Act (CCAA) was enacted in 1988 and requires air pollution control districts to achieve and maintain state air quality standards. The CCAA has given authority to the South Coast Air Quality Management District (SCAQMD) to regulate motor vehicle use with indirect source controls in areas that have not attained national or state ambient air quality standards. The 1990 Clean Air Amendments focus on reducing ozone and carbon monoxide violations by emphasizing strategies which reduce vehicle miles travelled. The plan also requires the adoption of transportation control strategies and measures to offset any increase in emissions or numbers of vehicle trips.
- Climatic Effects on Air Quality: Abundant sunshine during the warmer months causes photochemical reactions between nitrogen oxides and reactive organic compounds to form ozone. Although some ozone is generated locally, much of the ozone formed within the Los Angeles Basin drifts inland with the predominant wind patterns causing an increase in local ozone concentrations. Climatic conditions and topographical relief features such as mountain ranges also aid in hindering air pollutant dispersal and increase concentrations. For these reasons, local ozone concentration levels are highest in the afternoon when there is full sunlight and reactive organic compounds have been carried from the Los Angeles basin. Carbon monoxide and nitrogen oxide levels are highest during the winter season when temperature inversions typically occur. Carbon monoxide, a chemical by-product of automobile exhaust, is concentrated at busy intersections and does not extend over great distances.
- Measurement of Air Quality: The Hemet and Banning stations are approximately equidistant from Calimesa, and air quality data from both stations is used to characterize air pollutants affecting Calimesa. The Hemet station monitors ozone and the Banning station monitors suspended particulates. Ozone and suspended particulate levels have exceeded state and federal standards between 1987 and 1991. Carbon monoxide, nitrogen dioxide, and sulfur dioxide are not monitored at these stations because these air pollutants are not generated in large quantities in the area.
- Suggested and Required Measures: Measures which may reduce air quality emissions in Calimesa include providing local jobs for residents, thereby reducing work trips to



other communities; implementing dust control measures during construction and agricultural activities; promoting fuel saving or alternative fuel vehicles; exploring public transit options; and continuing waste reduction, water conservation, and recycling programs. Air quality programs in other cities are expected to lead to better air quality in the region. Also, development of new technology such as cleaner fuels, will create less emissions and reduce air pollution which affects the City.

- Jobs/Housing Balance: The City has more housing units than jobs and is considered "housing rich". It is likely that this ratio of housing to jobs will become more balanced as additional employment opportunities become available to meet local demand for goods and services. Additional jobs can be realized through development and redevelopment of the City's industrial and commercial areas, or by reaching agreements with surrounding cities to show that its housing surplus is being accounted for in the subregional jobs housing planning.

## **GOALS AND POLICIES**

The following goals and policies have been developed to correspond with measures that the City of Calimesa can implement to help improve its air quality. These include measures relating to alternative modes of transportation, vehicle emissions, parking, growth management, energy consumption, particulate emissions, building and design standards, and regional cooperation with neighboring jurisdictions. The goals and policies are expected to make the City more aware of the air quality impacts associated with land use decisions and to work towards the reduction of locally generated air pollution.

### **Alternative Travel**

**GOAL 1:** Promote alternative travel arrangements.

#### **Policies:**

- 1.1 Discourage the use of single-occupant vehicles.
- 1.2 Promote telecommuting and teleconferencing activities.
- 1.3 Support trip-reduction programs, such as longer day, shorter week work schedules.
- 1.4 Encourage the creation and participation by employers in the City in Transportation Management Associations/Organizations (TMA/TMO).
- 1.5 Encourage walking or bicycling.

## **Vehicle Emissions**

**GOAL 2:** Reduce emissions associated with vehicle use.

### **Policies:**

- 2.1 Reduce idling emissions by increasing traffic flow through synchronized traffic signals.
- 2.2 Develop a local transit system and facilitate connections of the local transit system to regional transit.
- 2.3 Encourage diversion of peak hour truck traffic, whenever feasible, to off-peak periods to reduce roadway congestion and associated emissions.
- 2.4 Work with Caltrans and City traffic engineers to insure that roadways and freeway on-ramps that are heavily utilized by trucks, are designed to safely accommodate trucks and to reduce the potential for accidents which create congestion and related emissions.
- 2.5 Encourage trucks operating within the City to maintain safety equipment and operate at safe speeds so as to reduce the potential for accidents.
- 2.6 Reduce vehicle emissions through improved parking design and management.
- 2.7 Encourage centrally located parking in the City's commercial areas where shoppers can walk to a number of destinations.

## **Jobs/Housing Balance**

**GOAL 3:** Reduce emissions associated with vehicle miles traveled by providing a balance of jobs and housing in the area.

### **Policies:**

- 3.1 Improve the City's balance of jobs and housing opportunities.
- 3.2 Work cooperatively with adjacent and nearby job-rich communities to improve overall job/housing balance in the subarea.
- 3.3 Encourage mixed use developments which combine housing and related commercial uses.

- 3.4 Encourage multi-family residential uses in and around commercial centers and transportation nodes and corridors, in order to shorten vehicle trips and encourage walking.
- 3.5 Develop neighborhood parks beside concentrations of residents to encourage pedestrian travel to recreation facilities.

## **Energy Consumption**

**GOAL 4:** Reduce emissions associated with energy consumption.

### **Policies:**

- 4.1 Support the use of energy-efficient equipment and design in City facilities and infrastructure.
- 4.2 Encourage incorporation of energy conservation features in new developments.
- 4.3 Support passive solar design in new construction.
- 4.4 Support recycling programs which reduce emissions associated with manufacturing and waste disposal.
- 4.5 Support drought-resistant vegetation in City landscaping areas and new development to reduce energy needed to pump water.

## **Particulate Emissions**

**GOAL 5:** Reduce fugitive dust emissions.

### **Policies:**

- 5.1 Require all feasible fugitive dust reduction techniques to be utilized during construction activities.
- 5.2 Support the use of efficient street cleaning equipment and practices.
- 5.3 Discourage the use of leaf blowers.
- 5.4 Support subdivision design which minimizes grading and maintains the natural topography to the maximum extent feasible.



## **Building and Operational Emissions**

**GOAL 6:** Reduce air pollution emissions and impacts through siting and building design.

### **Policies:**

- 6.1 Support the use of low polluting construction materials and coatings.
- 6.2 Actively encourage the separation of sensitive receptors, such as schools and hospitals, from sources of toxic emissions.
- 6.3 Actively encourage the separation of sensitive receptors from potential carbon monoxide hotspots.

## **Intergovernmental Cooperation**

**GOAL 7:** Maximize the effectiveness of air quality control programs through coordination with other governmental entities.

### **Policies:**

- 7.1 Require new local commercial and industrial establishments to demonstrate that South Coast Air Quality Management District permits have been obtained.
- 7.2 Support state and federal legislation that results in improved air quality in the South Coast Air Basin.
- 7.3 Participate and cooperate with neighboring cities in efforts to improve regional and subregional transit.
- 7.4 Improve the effectiveness of air quality programs through public education programs.
- 7.5 Provide assistance to local facilities in complying with South Coast Air Quality Management District rules and regulations.
- 7.6 Review development projects to determine the potential air quality impacts and provide appropriate mitigation where necessary.

## **AIR QUALITY PLAN**

Air quality affects the health of residents and employees and influences the quality of the environment. In Calimesa, local air quality can be positively affected by altering traditional

commuting patterns and construction practices. The Calimesa Air Quality Element focuses on reducing air quality impacts associated with the generation of vehicle emissions and fugitive dust. Implementation measures are identified to promote a more efficient land use mix, reduce vehicle trips, and practice site development methods which are sensitive to the natural topography and surrounding land uses.

Local air quality is also influenced by the predominant transportation modes. Creating a land use pattern which provides for resident's commercial needs, and encourages pedestrian activities is an important element in improving local air quality. Supporting transportation alternatives to the single occupant vehicle is another component in attaining improved air quality. The Federal Clean Air Act and the California Clean Air Act (CCAA) have devised federal and state air quality standards and requires areas in violation to prepare and implement compliance measures. The Air Quality Management Plan prepared by the Southern California Air Quality Management District (SCAQMD) addresses the CCAA requirements and identifies local measures on mobile and stationary sources of pollution. The Growth Management Plan prepared by the Southern California Association of Governments (SCAG) identifies measures to assist subregions in achieving a more balanced jobs/housing ratio.

Ozone generated by urban activities within the Los Angeles Basin is carried by the predominant wind patterns and contributes to ozone concentrations in the City. Calimesa has little control on these pollutants and those from nearby cities. Suspended particulates, which are less likely to be transported over long distances, are generated by local winds carrying dust from grading and construction activities, and uncultivated agricultural land in the area. In Calimesa, air quality concerns focus on reducing local vehicle traffic, and implementing construction, grading and agricultural practices which reduce the amount of fugitive dust generated.

Reducing vehicle trips is strongly correlated with providing a pedestrian scale environment and transit alternatives to the single occupant vehicle. Because Southern California has been particularly slow to adopting alternative transportation modes, a variety of incentives need to be given to riders in the initial stages of operation. These may include promotions and discounts available to transit riders, bicycle riders, and walkers. Developing the City's commercial base to include a greater variety of goods and services, generate additional employment opportunities, and fulfill a greater portion of the resident's shopping needs will help meet this objective.

Using redevelopment funds to assist in the improvement of the aesthetics of existing commercial development will tend to stimulate additional development and activities along Calimesa Boulevard. Providing commercial areas near residential uses is also an effective mechanism for encouraging pedestrian activities and reducing the number of generated vehicle trips. Limiting the number of available parking spaces and offering incentives to employees who use alternate transit modes have also proven effective in reducing the number of vehicle trips. The City should explore smaller scale transit options including vanpool, shuttle, and dial-a-ride operations which could provide service from residential neighborhoods to the City's commercial district. Additional mechanisms resulting in



reduced vehicle miles travelled include: telecommuting and teleconferencing, and implementing shorter work weeks. The City can assist this process by encouraging residents, employees and visitors to utilize new transit alternatives and distributing transit schedules throughout the community.

Uncultivated agricultural land and land undergoing grading and construction activities result in soil disturbance and fugitive dust. Wind-borne dust is carried to surrounding areas by the predominant wind pattern. Although fugitive dust is not harmful to human health, it settles on unenclosed objects including cars, windows, and structural appurtenances and is generally a nuisance. It is also irritating to residents, students, and users of institutional facilities. Local winds also transport fugitive dust and agricultural-related odors.

The application of soil stabilizers to uncultivated agricultural land and site development activities is effective in preventing the generation and spread of fugitive dust. Planning and situating development to follow the natural contours of the land minimizes the extent of grading necessary. Implementing street cleaning practices and discouraging the use of leaf blowers also prevents the transport of fugitive dust.

The SCAQMD has developed a number of ordinances to improve air quality in the South Coast Basin. New developments are subject to increasingly stringent controls on the amount of vehicle trips and air pollutants they generate, and must comply with the adopted measures or face penalties. Because the SCAQMD measures focus on modifying traditional practices rather than developing or applying advanced technological controls, residents and employees are given control and responsibility for positively influencing local air quality. The City of Calimesa is committed to achieving reduced ozone and suspended particulate concentrations and improving local air quality.

Unimpeded vehicle flow along commercial corridors and reductions in the amount of household and commercial waste can effectively decrease air pollutant emissions. Synchronizing traffic signals and diverting peak hour truck traffic, for example, improves vehicle flow. Waste recycling programs reduces the need for composting and landfill space. A corresponding reduction in truck trips is also achieved. The use of energy conservation measures at residences, commercial establishments, manufacturing and public facilities can reduce operational costs and power generation plant emissions.

## **IMPLEMENTATION PROGRAMS**

The Air Quality Element addresses local issues and programs to improve air quality. The Element emphasizes actions that the City should take, as well as programs that will facilitate participation by local employers and residents in efforts to improve local and regional air quality. These are discussed below:



## **1. Public Transit Program**

The City of Calimesa shall explore the options of providing smaller scale transit including vanpool, shuttle, and dial-a-ride operations which could provide service between the City's residential and commercial areas. The City shall also examine routes which would provide the most efficient transit service.

If one or more transit options are selected and implemented, transit information and schedules should be made available at bus stops and shelters, City Hall, the Norton Younglove Multipurpose Senior Center, and at larger commercial and industrial developments in the City. The City shall promote the use of local transit through advertisements in the local newspaper.

## **2. SCAQMD Funds**

The SCAQMD has established a fund for education programs on public transit and innovative demonstration programs that reduce individual passenger vehicle use. The SCAQMD also has funds for innovative projects which encourage alternate modes of travel and reduce the need for parking. The City of Calimesa should seek funding from the SCAQMD Mobile Source Discretionary Fund and Vehicle License Fund for local programs.

## **3. Telecommuting and Teleconferencing**

The City of Calimesa shall promote telecommuting and teleconferencing activities for businesses and residents. It should examine the feasibility of an ordinance requiring new commercial and professional office developments to establish telecommuting and teleconferencing spaces, and authorizing their use by City employees. The City should also review the zoning ordinance and amend it to permit telecommuting and home employment, where such employment does not result in added traffic, noise or otherwise intrude on residential neighborhoods.

## **4. Flextime Work Schedules**

The City of Calimesa shall examine implementing 9/80 or 4/10 work weeks for city employees. At the same time, it should publicize the advantages that city employees experience with these trip reduction programs and encourage private businesses to do the same.

## **5. Walking, Multi-purpose and Equestrian Trails**

Currently, there is a trail system for walkers, hikers, cyclists and equestrians along City streets, through portions of the commercial district and the Oak Hills area. The existing trail system also connects with the Yucaipa trail system. Additional trails should be designated to provide additional routes and links, including trails through the Oak Valley Specific Plan area. Signs should be posted at appropriate locations along the trail routes listing the permitted activities and safety precautions.

The City shall adopt and implement a trails plan to serve and connect the City's commercial corridor, residential and open space areas, and surrounding areas, as discussed in the Resource Management Element.

#### **6. Walking and Biking Activities**

The City shall cooperate in the scheduling of walkathons, bicycle races, street fairs, and other recreation programs which will promote the benefits of walking or biking. The City will work with the local newspaper and the Chamber of Commerce, in the use of delivery services and other shopping promotions to customers who arrive by walking or cycling, or other alternate transportation forms. The City should seek funding from SCAQMD Mobile Source Discretionary Fund for these special promotions.

#### **7. Bicycle Facilities**

The City should develop regulations for secure parking areas for bicycles and showers and locker facilities at new commercial and industrial facilities. This will encourage bicycle use for local employees.

#### **8. Traffic Safety Programs**

The City shall coordinate traffic safety programs with adjacent cities and communities. It shall coordinate with Caltrans on the design and maintenance of Interstate 10, to facilitate access and minimize accidents and congestion.

#### **9. Traffic Signals**

The City shall routinely evaluate the need for traffic signals and signs, and install and remove them as required. The City will identify those intersections where traffic controls may be added to enhance the roadway level of service.

#### **10. City Vehicles and Equipment**

The City should purchase vehicles and other equipment for public use that use *methanol* or other low-emissions fuels that are cost effective to purchase, use and maintain. It should require that vehicles purchased for the City's vehicle fleet comply with SCAQMD's existing and proposed regulations, as required by the California Clean Air Act.

#### **11. Relationship of Jobs to Housing**

The City should evaluate the impacts on jobs/housing balance of new development and cumulatively address these impacts by encouraging increased employment opportunities for Calimesa residents.

It should initiate talks with adjacent cities on potential area-wide strategies to promote jobs/housing balance in the subregion.

## **12. Energy Conservation**

Title 24 of the California Administrative Code outlines insulation and energy conservation standards for new development. A number of other energy conservation practices and design features are recommended by state and local agencies and utility companies. The City should enforce state laws on energy conservation design and appliances.

Natural gas and power companies have developed energy conservation designs and measures and offer free consultation services to developers and users. The City of Calimesa can take advantage of these services by initiating contact between local utility companies and developers during the review process. It shall encourage developers to consult with local utility companies on possible energy conservation measures to incorporate into new developments. There are rebate programs, experimental homes, museums, free audits and a host of other services to help conserve energy.

There are brochures available and informational material from utility companies that explain the need for energy conservation and the different ways this may be achieved. Copies of energy conservation brochures should be made available at City Hall for residents and developers. The City should explore with public utility companies the feasibility of retrofitting city facilities for energy-efficient appliances. It should require the use of the most cost-effective energy-saving equipment, heating and lighting in all new City buildings, considering installation, operating and maintenance costs. The City should also encourage the use of passive solar design systems.

## **13. Source Reduction and Recycling Element**

The California Integrated Waste Management Act of 1989 addresses the need for the reduction of solid wastes. It requires counties and cities to achieve a 25 percent waste reduction by 1995 and a 50 percent reduction by the year 2000. These cuts may be implemented by recycling programs, composting, source reduction or other means. This program is discussed in the Land Use Element.

## **14. Water Conservation Ordinance**

Water conservation efforts in Calimesa are promoted by its Water Conservation Ordinance. This ordinance encourages the use of drought-tolerant vegetation to decrease the need for watering yards, landscaping and open fields. The City should continue to promote the use of drought-tolerant landscaping, to complement the existing turf reduction requirements. The City shall explore the use of reclaimed water for the irrigation of recreational facilities and public rights-of-way, if they will not pose any threats to public health and safety. This may include the provision of incentives to developments which utilize reclaimed water.



It shall require the use of water efficient plumbing appliances in new developments and city facilities. Public information campaigns and brochures describing additional water conservation measures have also proven effectively in reducing water consumption. They shall be made available at City Hall, the Library and the Senior Center.

The City shall coordinate this program with the water conservation programs of local purveyors (Yucaipa Valley Water District and South Mesa Water Company).

## **15. Construction-related Emissions**

The City should develop a program, in cooperation with existing SCAQMD regulations which will be effective in controlling short-term construction related emissions. The existing SCAQMD regulations focusing on fugitive dust control will serve as the framework for the City's program. They include:

- Use low emission mobile construction equipment (e.g., tractor, scraper, dozer etc.).
- Develop trip reduction plan to achieve 1.5 AVR for construction employees.
- Water site and clean equipment morning and evening.
- Spread soil binders on site, unpaved roads and parking areas.
- Apply District approved chemical soil stabilizers according to manufacturers specifications, to all inactive construction areas (previously graded areas which remain inactive for 96 hours).
- Reestablish ground cover on construction site through seeding and watering.
- Implement or contribute to an urban tree planting program to off-set the loss of existing trees at the construction site.
- Employ construction activity management techniques, such as: extending the construction period; reducing the number of pieces of equipment used simultaneously; increasing the distance between the emission sources; reducing or changing the hours of construction; and scheduling activity during off-peak-hours.
- Pave construction roads, and sweep streets if silt is carried over to adjacent public thoroughfares.
- Reduce traffic speeds on all unpaved road surfaces to 15 miles per hour or less.
- Require a phased-schedule for construction activities to minimize emissions.
- Suspend grading operations during first and second stage smog alerts.
- Suspend all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.
- Wash off trucks leaving the site.
- Maintain construction equipment engines by keeping them tuned.
- Use low sulfur fuel for stationary construction equipment.
- Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.
- Use low emission on-site stationary equipment.

## **16. Low-Polluting Materials**

The City shall explore available literature on low polluting construction materials and coatings which can be made available for developers and interested persons. It shall consider the air pollution impacts of coatings in the environmental review of proposed projects and credit the use of low polluting materials as mitigation measures.

The City shall also encourage best available control technology (BACT) in commercial and industrial operations to reduce pollutant emissions.

## **17. Toxic Emissions**

The City shall evaluate all new industrial developments to ascertain if any toxic compounds are used in the operation and require that they comply with all equipment, risk assessment, and notification requirements of the SCAQMD prior to being issued a building permit. It shall actively discourage industrial development that may release toxic emissions from locating near sensitive receptors (schools, medical facilities, and residences).

## **18. Air Quality Coordinator**

The City shall keep track of the SCAQMD rule development process, inform other City departments and the City Council, and convey the concerns of Calimesa residents and comment on issues affecting the City. A City employee shall be assigned the task of coordinating with the SCAQMD, SCAG and WRCOG in monitoring the implementation of air quality programs and regulations in the City of Calimesa. The air quality coordinator would be the City's representative for expressing the City's position on state and federal air quality regulations.

## **19. SCAQMD Permits**

The City should provide a summary of SCAQMD regulations for local citizen use or obtain information brochures from the SCAQMD, and provide technical assistance for compliance with SCAQMD rules. The Planning Department shall maintain information on current and proposed SCAQMD regulations and work with the SCAQMD to assist Calimesa residents and industries in complying with SCAQMD regulations. Prior to issuing occupancy permits, the City shall require written proof that the applicant has obtained all required SCAQMD permits and is in compliance with SCAQMD rules.







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